THE MANKIND QUARTERLY

CHICAGO CIRCLE

AN INTERNATIONAL QUARTERLY JOURNAL
dealing with Race and Inheritance in the Fields of
ETHNOLOGY · ETHNO- AND HUMAN GENETICS
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DEMOGRAPHY AND ANTHROPO-GEOGRAPHY

Vol. II, No. 2 · October-December 1961

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The Review of the ITALIAN COMMITTEE FOR THE STUDY OF POPULATION PROBLEMS *and of the* ITALIAN SOCIETY OF GENETICS AND EUGENICS. *Edited under the auspices of the National Research Council.*

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VOL. II, NO. 2 THE OCT.–DEC. 1961

MANKIND

QUARTERLY

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Published by
THE MANKIND QUARTERLY
1 Darnaway Street, Edinburgh 3, Scotland

Printed by
MACDONALD PRINTERS (EDINBURGH) LIMITED
1 & 2 Richmond Lane. Edinburgh 8

VOL. II, NO. 2 OCT.–DEC. 1961

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THE MANKIND QUARTERLY UNDER ATTACK

By THE EDITOR

The editors of THE MANKIND QUARTERLY, although belonging to different disciplines, have a common interest in heredity and ethnology—an interest which they share with their collaborators who have written papers for publication in it and with the great and ever increasing number of its readers. The editors and their friends were conscious of the harm which Nazism had done to the whole field of these studies in so far as terrible crimes and gross abuses having been committed, allegedly in the name of "race," had led to such a violent reaction against the classical development of anthropological studies that it could fairly be said that scientific objectivity had, in far too many cases, been obscured or even lost. In fact Nazism had not been concerned with *race* as understood by anthropologists, but with the term "race" as used for a perverted form of Germanism and as the excuse for a vindictive and horrible persecution of, in particular, the Jews. The crimes of the Nazis did not, however, justify the enthronement of a doctrine of *a-racialism* as fact, nor of egalitarianism as ethnically and ethically demonstrable. We felt, therefore, that the time had come to provide a medium in which articles could appear dealing with heredity and race as those terms were originally understood, before the tragedy of Nazism and the reaction to its bestialities had come to bedevil our field of studies.

We were conscious, of course, that we had to contend not only with the honest distortion, often subconscious, which had arisen as a consequence of reaction against Nazi *racialism*, which had deprived many writers and workers in this group of studies of the objectivity which they would have maintained had Adolf Hitler never come to power in 1933, but also with the impact of Communism on these studies. For, in order to establish the plausibility of that political doctrine, it is necessary to argue that the egalitarian society, which is the alleged goal of Communism, is in fact justified by scientific facts. Communism has not therefore been slow to exploit the natural reaction to Nazism. International Communism and all those who lean towards Marxism—whether

they are members of the political party or not—have combined to denounce those who do not slavishly subscribe to *egalitarian* and *a-racialist* dogmas as "racialists" and their teachings as "racialism," and, where they dare, to call such thinkers and teachers Nazis and what they teach Nazism.

The fear of being so abused has for the last one or two decades been sufficient to silence many, if not most, scholars and prevent them from writing what they believed and thought to be the facts in connection with anthropological subjects. They have, in the main, confined themselves to negative action, such as protesting when the notorious UNESCO pamphlet on race was produced, and being happy to gain, as a result, some modification of the more extreme and more nonsensical assertions of the a-racist egalitarians.

That there has been such a clearly marked reactionary influence, if not domination, over our studies is so patently obvious that it hardly needs to be stressed. Even those who have not subscribed to any form of political doctrine have felt it safer to make interpretations of the facts of race and heredity in such terms that they can bear a clearly egalitarian interpretation. The general reduction of interest in twin-studies which was marked in Russia, after it was realised there that they were a damning indictment of egalitarian dogma, and the playing down of any reference to them, especially in the period of Lysenko's domination, is an instance of how deliberately those who are actuated by political dogma are prepared to distort scientific fact, or suppress it, for their own ends. The anxiety which is shown to suppress publications and expositions which do not support egalitarianism is entirely consistent with this political direction of, and domination over, science. To this we shall shortly return when we come to consider the terms and tone of the abuse to which this publication has been subjected in certain quarters.

Meanwhile, we wish to state categorically what are the views of the editors on the matter of racial equality. While rejecting racial egalitarianism as having no warranty in honest scientific expositions and investigations, we do not, on the other hand, subscribe to doctrines of racial *superiority* or *inferiority*. We believe that just as all individuals within a particular stock are different, so is one racial group in relation to another. In respect of some characters various stocks will be superior to others, and in other characters inferior, but in many cases no perceptible differences may be apparent. While environment, both physical and social, may influence these characters, we believe that heredity is by far the most important single factor, and the current fashion to eschew the significance of heredity is a definite disservice to the understanding of what makes for differences in the various characters

which distinguish one group from another. Furthermore, we do not presume to judge what is desirably superior or not. We think that within the ambit of the type of civilisation erected by the White-Brown stocks or the Yellow races, the Black which has shown no natural predilection to that form of organization will be at a disadvantage in any competition—and is *in that sense* inferior. After all, *a priori* considerations alone would lead to this conclusion, and if modern science thinks that this is not the case, it has yet to show why and how the Melanoids have remained technologically backward compared to both the Mongoloids and Caucasoids. For the Egyptian civilization, which was basically Caucasoid (Mediterranean, Atlantic, Nordic and Armenoid strains being the basis of that nationality), abutted on the Negroid world of Africa, and its ideas were there to be accepted and copied, so that urban technological civilizations could have been erected in Africa, if that way of life had appealed to the inherent Negroid genius and temperament. It is only within this last millennium that certain ideas generated in Egypt four millennia ago began to reach West Africa—long after the Nile Valley civilization had decayed and disappeared.

With such considerations in mind, no one ought to be surprised if intelligence or other tests *designed primarily for the conditions of life which are those of the Caucasoid stock* show, when applied to Negroids, that the Black races are inferior *in these respects*. It would be very odd if that were not the case. But if, in contrast, tests were applied which suited the genius of the Black races, such as those which gave due credit in the field of humour, music, art, ability to live a communal life and existence (as distinct from the competitive form of civilization which the Caucasoids tend to erect), feeling for emotional religious expression, or physical ability in boxing, running, and much else, it would be very surprising if the Negroids did not prove themselves superior to the Europeans. Thus we do not believe in *absolute* superiority or inferiority between one stock and another. There are racial differences, and difference implies inferiority or superiority in relation to this or that character involved—but no one who holds our point of view would argue that *all* the characters of one racial group are superior to *all* the characters of another.

The Scots, to take a national group of a distinctly different Caucasoid stock from the Jews (who are rather more Armenoid Europeans than of any other strain), have like the Jews wandered far and wide, and partially for a similar reason—the need for migration—although the causes of that migration have been different. But the genius of these two stocks has been quite different. The Scots have been pioneers tending to establish a society, whereas the Jews have tended to follow afterwards and work in a society

already established, although naturally retaining their own individual characteristics. Both these strains—as Mr Weyl's articles in THE MANKIND QUARTERLY have shown—have made very great contributions to American genius. But, just as the quality of their settlement has differed, so has the type of contribution which they have made. Who is to say which is inferior and which superior? But we can say that the Jews, in a particular field, place, and period of time, have proved superior to the Scots, while in another field the latter have proved the superior. This is solely because races and ethnic groups, and even more so the great specific stocks of mankind, are different from each other, and so inferior and superior in differing qualities.

Thus to hold as we do that all racial groups are different, and at the same time to deny the doctrines of the egalitarians, is not to preach or suggest a doctrine of racial superiority for any one stock over another.

Yet the egalitarians, doubtless under the drive of a dynamic political philosophy, fail in too many cases to see that there is a middle position between racial egalitarianism and the Nazi doctrines of racial superiority. When anyone brings forward evidence of racial differences, the egalitarians deliberately infer that the only alternative to their own scientifically quite groundless doctrines is Nazi racialism. We are of the opinion that views grounded upon the concepts of anthropological studies evolved prior to the impact of the distortions of science produced in the mid-twentieth century, which avoid supporting either of these political dogmas, are more likely to stand at the end of the day.

It is, however, typical of politically orientated debate to smear the opponents and to exploit this technique wherever possible. Since the impact of THE MANKIND QUARTERLY has led to an outburst of open or veiled abuse among those who consider it the duty of science to expound "liberal" egalitarian interpretations of man and his society, it strongly suggests that the crime which the editors have committed is that they are "deviationists" who are departing from a *doctrinally* accepted line and so, as heretics, are to be suppressed.

That this is no exaggeration can be seen from the terms used in the various attacks upon THE MANKIND QUARTERLY in a number of otherwise scientific publications. We are attacked as "racists," and what is written and published by us as "racism." But it does not stop there—some go further and not only deliberately misinterpret or misunderstand what we have written, but assail the qualities and qualifications of the writers. Some of them, needless to say, while writing in journals dedicated to an *ex parte* "liberal" presentation of race, denounce papers and articles in this pub-

lication as pseudo-scientific! These techniques belong to the Hitlerite regime in Germany and to the current authoritarian regimes of many countries—but they do not belong to the real liberal and scientific spirit of the western world. We might also add that, if these apologists for what is for convenience best called "a-racism" were really on good and strong scientific grounds, they would not need to stoop to the smear tactics of totalitarian thought, either as a weapon in discussion concerning the subject matter published by us, or in connection with the qualifications of the writers. The very headings under which THE MANKIND QUARTERLY has been abused, and the attitude of the propagandists who have taken part in these sorry manifestations of totalitarian dogmatism towards the editors personally, strip them of all reason to be regarded as truly scientific—no matter how great may be their reputation. A great name which debases itself by such methods ceases to be held in any respect. We do not think that it is going too far to say that the assault made upon the contributors to this publication has its nearest parallel in that which faced Charles Darwin from the entrenched forces of scientific and philosophical dogmatism and error in the last century.

Normally it will be our policy to ignore these outbursts against the editors and contributors—unless the abuse becomes defamatory, when it will be dealt with by due process of law—since we are certain that the very hostility shown, with the smear technique so often associated with it, will be sufficient condemnation of the writers, and of the publications in which their effusions appear, before the bar of informed and fair-minded public opinion. Time will bring a terrible punishment to the reputations of those who, in order to establish a myth for political and ideological ends, have lent their names to such activities.

However, while to ignore such outbursts—with the reservation already made—will be our normal conduct, we have not been able to maintain that policy in the case of the campaign which one Professor Comas, of Mexico, has whipped up in *Current Anthropology* against THE MANKIND QUARTERLY, its editors and contributors. The name of Professor Comas will already be familiar to readers, if it was not before, because of his work "Racial Myths" reviewed by Dr Gregor in our last issue.

The editor of *Current Anthropology*, Professor Sol Tax, was good enough to communicate with the three editors and ask them to comment upon the Comas fulminations, which were headed quite characteristically " 'Scientific' Racism Again?" Short replies were published in *Current Anthropology* by Professor R. Ruggles Gates, Professor Henry E. Garrett and the writer. Since we were led into the position of making replies, and as these replies had to

be in the nature of things far shorter than the campaign initiated against THE MANKIND QUARTERLY, we promised the readers of *Current Anthropology* a reply at greater length in this publication than could take place in their own. For that reason, and that reason alone, we are occupying our readers' attention with a rebuttal of the allegations of Professor Comas.

Since our readers are more interested in the constructive discussion and positive facts of anthropology and the races of mankind, we do not intend to divert their attention into lengthy rebuttals of the quite sterile, misleading and often mischievous abuse to which THE MANKIND QUARTERLY is being subjected. Therefore, in addition to this general, editorial reply, only that by Professor Garrett will be published in this issue. A reply by Professor R. Ruggles Gates will be published later.

Before concluding this editorial comment, we would draw the attention of our readers to the recruitment in aid of Professor Comas' campaign, evidenced by the publication in *Current Anthropology* of certain significant names, which would appear entirely to justify what we have said earlier: that THE MANKIND QUARTERLY is under attack not because of any failure to preserve scientific objectivity but because what it has published has conflicted substantially with a preconceived political philosophy. We think that this is significant enough to indicate the reason for the hostility generated in certain circles to the existance of this publication.

The political considerations which are often to the forefront in these recurrent attacks are seen in a review in the September number of *Man*, which concludes its diatribe with the words "and it is earnestly hoped that *The Mankind Quarterly* will succumb before it can further discredit anthropology and *do more damage* [our italics] to mankind."

Despite this hostility, not only are more scholars undertaking to furnish articles for publication, but the subscribers are increasing in number, and it may not be long before this is the most widely read of all English language anthropological publications. It is quite clear that THE MANKIND QUARTERLY is fufilling a considerable need, and we do not intend to be bludgeoned into silence by these recurrent attacks which are mainly in ill taste, and are certainly, as we have shown in the case of Professor Comas' effort, not devoid of markedly political overtones.

We are confident that our readers will continue to support us, and our contributors to send us their material for publication, for we are certain that, in the long run, an objective adherence to the broad facts of ascertained scientific investigation will justify the work of THE MANKIND QUARTERLY.

Anthropological Investigations of Skiers

By WANDA STESLICKA

This paper concerns the investigations of participants in the European Ski Championships in Zakopane, Poland, in 1949, the anthropometric material for which had been collected by the late Jan Mydlarski and by the present writer. We had at our disposal 134 males and 30 females who represented 6 State teams, numbering from 4 to 45 competitors in a team.

The analysis was concerned with 19 anthropometric characteristics, including the traditional cephalometric features used for racial diagnosis.

So that the interpretation of the results can be understood, it is necessary to set out, although briefly, the racial classifications which are employed in Poland.

From an examination of various European populations, it has been ascertained that the values of certain anthropological characteristics (the cephalic, facial and nasal indices, the colour of the eyes and hair, stature) do not form "mosaic combinations," but show a strong tendency to become associated in certain definite sets—the so-called racial elements and their hybrids.

According to Jan Czekanowski, we find four racial elements in Middle European populations: *a*, the Nordic; *e*, the Mediterranean; *h*, the Armenoid; *l*, the Lapponoid; and six mixed types treated as hybrids of only two racial elements: *ae*, the North-Western; *ah*, the Dinaric; *al*, the Subnordic (similar to the East Baltic); *eh*, the Littoral; *el*, the Sublapponoid; and *hl*, the Alpine.

According to Czekanowski, the tendency for the simultaneous appearance of certain anthropological characteristics is a phenotypical aspect of particular genetic mechanisms. Czekanowski's genetic hypothesis of four homozygotic racial elements (*aa*, *ee*, *hh* and *ll*) and their six heterozygotic hybrids enables a calculation of the racial composition of a population (Czekanowski's "anthropological structure") expressed in percentage. For this purpose each hybrid is divided into two halves and added to both parental elements. This method of halving has been criticised as being oversimplified; nevertheless compositions (anthropological structures) calculated in this easy manner give good results and render possible the comparison of various populations with regard to race, which is of paramount importance in anthropological investigations.

Great interest has recently been aroused by the new method of points of reference introduced by Adam Wanke of Wroclaw. He calculates the racial composition of a population—with the same four elements—by using equations of multi-dimensional analytic geometry. Compositions calculated in this manner are quite objective.

In the present paper I have used the simple previous method of halving. Attempts to apply both methods (Czekanowski and Wanke) to the same material showed that the results are satisfactorily similar.

Table 1 demonstrates the racial composition of the male teams.

TABLE I

The Racial Composition of the Males

	No.	*a* %	*e* %	*h* %	*l* %
Finland	4	75.0	—	—	25.0
Poland	45	45.6	7.7	16.7	30.0
Czechoslovakia	27	39.0	5.5	22.2	33.3
Hungary	23	30.0	22.0	22.0	26.0
Rumania	24	31.0	19.0	29.0	21.0
Bulgaria	11	13.9	27.0	50.0	9.1

The racial diagnosis of each individual has been established on the basis of morphological tests and verified by the diagraphic method—the differential diagnosis—of J. Czekanowski.

Czekanowski's method of differential diagnosis has been known in anthropology since 1909. It is a method of classification and division into groups of a collection of individuals characterized by metrical features. The starting point for the method of differential diagnosis is Czekanowski's table of distances of individuals.

TABLE II

The Table of Distances of the Male Teams

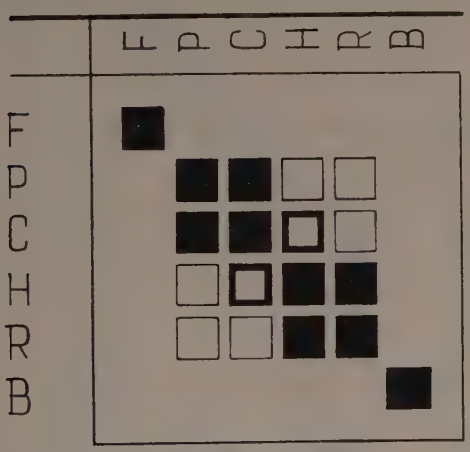
	*F	P	C	H	R	B
Finland	0	14.7	18.0	22.5	24.0	38.5
Poland	14.7	0	4.4	9.8	10.4	26.3
Czechoslovakia	18.0	4.4	0	8.2	10.1	24.6
Hungary	22.5	9.8	8.2	0	4.0	16.5
Rumania	24.0	10.4	10.1	4.0	0	14.5
Bulgaria	38.5	26.3	24.6	16.5	14.5	0

* F=Finland, P=Poland, C=Czechoslovakia, H=Hungary R=Rumania, B=Bulgaria

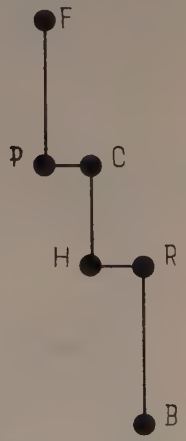
In Table II the distances based on the data of Table I are given. In forming this table the distances between two teams are counted as the arithmetic means of absolute differences of figures. For instance between Finland and Poland: 29.4 + 7.7 + 16.7 + 5.0 = 58.8 : 4 = 14.7. This mean distance for any pair of teams is to be found in the table at the intersection of the vertical column and the horizontal row.

The figures of the table of distances led to a diagram similar to Czekanowski's (Graph 1). The fields of the diagram are shadowed so that zero and the first minimal distances are completely black, and the following distances lighter.

The Polish mathematician Hugo Steinhaus and his collaborators suggest a new method of classification and division into groups which is in some way an extension of Czekanowski's diagram. The



GRAPH 1



GRAPH 2

Graph 1.—Diagram after Czekanowski. The material is divided into national groups. The racial classification (see Table I) is congruent with the successes obtained in the Championships. The Nordic element and its derivatives produced the best skiers.

F=Finland, P=Poland, C=Czechoslovakia. H=Hungary, R=Rumania, B=Bulgaria.

Graph 2.—The dendritic arrangement gave the same results as the diagram (Graph 1).

starting point is the same table of distances as above. Based on this table the individuals are arranged so that each individual is joined to the nearest one. If this does not bring about the junction of all individuals in one group, we go on by joining each group

of individuals to the nearest group. The joining is repeated until all the individuals are arranged in one group. This dendritic method of classification leads to an arrangement that allows ramifications and has besides the smallest total length (Graph 2).

From the racial analysis it seems evident that in ski-ing the Nordic element and its derivatives are privileged by selection. The results demonstrated both in Czekanowski's diagram (Graph 1) and in the dendritic arrangement (Graph 2) are congruent with the successes obtained in the Championships. The most successful was the most Nordic team of Finland, the least the Bulgarian (only 13.9% Nordic). It is evident, moreover, that geographical reasons also play a great part here—the facilities for training, etc. Nevertheless one cannot deny the influence of the racial factor in physical training. In proof of this fact Table 3 gives a comparison between the Polish team of gymnasts (IXth Olympic Championships in Amsterdam, 1928) and the Polish team of Skiers (Zakopane, 1949).

TABLE III

Differences in Racial Structure between Gymnasts and Skiers

THE RACIAL DIAGNOSIS	GYMNASTS	SKIERS	DIFFERENCES
aa	0.0%	6.7%	+ 6.7
al	10.5%	48.9%	+38.4
ae	5.3%	13.3%	+ 8.0
eh	0.0%	2.2%	+ 2.2
ah, hh, hl	36.8%	26.7%	−10.1
ll	21.1%	2.2%	−18.9
el	26.3%	0.0%	−26.3

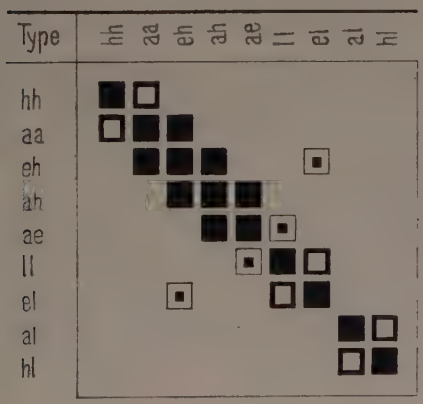
For the problems of the somato-types the new indices proposed by Julian Perkal (1953) were employed as the method of investigation. It is necessary to set out, although briefly, the method of arriving at Perkal's indices.

The problem of standardization to 0 and 1 has long been known in statistics and Perkal began from this point. We divide the difference of an individual feature from the arithmetical mean by the dispersion and we get an estimation of the feature with a minus or plus number or zero. An individual may be regarded as average when the values of all his characteristics equal zero. The individual whose characteristics are all minus is smaller than average, while the type whose characteristics are all plus will be larger than average. Therefore the arithmetic mean of all the standardized characteristics j of an individual may be called the magnitude of the individual m_j.

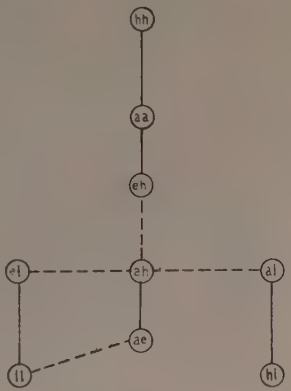
Perkal's definitive indices can be found by subtracting from each of the standardized characteristics j of an individual his mean index m_j.

These indices have the property of expressing by their own sign and magnitude the reciprocal interdependence of characteristics—in our case the proportions of body build in the skiers examined in this paper.

Since the indices described may be used in arithmetical operations, they permit us to group the material and to find, for instance, the average values of skiers in the Polish team, for



GRAPH 3



GRAPH 4

Graph 3.—Czekanowski's diagram with reference to the somatotypes in racial groups.

Graph 4.—The dendritic arrangement with reference to the somatotypes in racial groups.

racial elements, for males and females, or for groups of winners, etc. These operations can be found in the original paper. Let us demonstrate only one example: the differences in somato-types between racial groups. To ascertain whether the racial groups are different in body build, Czekanowski's table of distances was calculated on the basis of the arithmetical means of Perkal's indices for particular characteristics. Graph 3 demonstrates Czekanowski's diagram and Graph 4 the dendritic arrangement with reference to the racial groups.

The internal personal variability of each individual may be estimated by summing up the absolute values of his greatest positive and his greatest negative Perkal's index and by multiply-

ing the sum by 100. Among leapers (males) and slalomists (females) a smaller variability was ascertained.

TABLE IV

The Internal Personal Variability

MALES	INDEX	FEMALES	INDEX
Leapers	183.4	Slalomists	167.5
Runners	200.0	Runners	232.0

This would show that leapers and slalomists form groups more highly selected in body build in relation to the runners (both males and females).

Finally the indices of dimorphism have been employed (Steslicka 1958). This new method comprehends characteristics relating to the whole group investigated and to their mutual interdependence. It is, therefore, a sort of multiple check. In any case when we have two contrasting types in a set, *e.g.* the feminine and the masculine, or the leptosomic and the eurysomic, or even Pithecanthropus and Homo sapiens, etc., we can employ these indices. It is an attempt to make a linear classification with two points of reference which enables an accurate calculation of the similarity of each individual of the set expressed in percentage in reference to the two contrasts. To obtain the indices of dimorphism the distances of each individual feature from the minimal and maximal value of this feature in the investigated group are calculated as a percentage of the total range. Taking stature as an example, let us demonstrate by calculation: the minimum stature (in females) is 142 cm., and the maximum (in males) is 188 cm. The height of competitor No. 125 = 170 cm., we obtain the following value:

$$\frac{170 - 142}{188 - 142} \times 100 = 60.87\%$$

(It is sufficient to calculate only one index from the minimum because the other index from the maximum equals $100\% - 60.87\% = 39.13\%$).

Proceeding in this way with every characteristic, we obtain singular indices for the features of each of the competitors. The arithmetic mean of all singular indices gives us the total index of dimorphism for each individuum. The indices thus constructed permit us to combine skiers into common groups, *i.e.* the sexual groups, the groups of winners and non-winners etc.

The total analysis led to the following statements:

The morphological features most characteristic of the build of

a good skier are the lower sections of the body, with more highly developed transverse measurements of the skeleton.

A masculinisation of female body build even after a long time of ski-ing is not observed.

Among winners, a smaller variability of inter-personal features was ascertained.

The winners fell into two typological groups. The leaper of a slim build is younger in relation to the remainder. The group of runners was composed of older competitors of higher stature and stocky build. Nevertheless both are for the most part Nordic in type.

In the discussion, characteristics drawn from personal questionnaires were taken into account, concerning the age, period of ski-ing practice, and increase in body weight of the skier during his career in ski-ing.

No feature in the build of a skier has been discovered which could play any *decisive* part in success.

The employment of these methods permits a much deeper insight into the meaning of variability within the organism than the method of quotient indices previously applied. The characterization based on Perkal's indices has a biological relevance because each of the competitors is shown against the background of the total investigated group, and his reciprocally linked characteristics comprehend his body build as a whole.

BIOGRAPHICAL NOTE

Wanda Steslicka studied at the University of Cracow where she specialised in Germanic Philology until 1929 and, between the end of the second world war and 1946, at the University of Lublin where she specialised in Anthropology. She is a disciple of Professor Jan Mydlarski, who belonged to the Polish Anthropological School of Professor Jan Czekanowski. She became a Doctor of Science in Anthropology in 1948 on the basis of a dissertation on "The Systematic Position of Ngandong Man," and was appointed to the University of Wroclaw the next year. She was made Docent with the right to lecture in the University (*venia legendi*) in May 1954, and Professor Extraordinarius of Anthropology in March 1960. In her scientific work she is mainly engaged in palaeoanthropology, comparative odontology, human biology and in applying anthropology to physical training. She is also engaged in a wide popularisation of anthropological problems which she considers an important mission in a country constructing a socialist system.

Todas and Kotas of the Nilgiri Hills

Part II

By R. RUGGLES GATES

In early accounts of the Todas, little mention is made of music and they were later regarded as quite unmusical. Emeneau (1937b) has shown, on the contrary, that the art of song is highly developed and plays an extremely large part in Toda life. Every man or woman knows many songs, and new songs are constantly being composed which quickly spread through the whole area (roughly 20 x 10 miles). The art of story-telling is, on the contrary, almost non-existent. Only the men dance, forming a circle with joined hands. The feet are always bare.

By contrast, the Kota music has long been well known. Their small bands of about five performers have, from the earliest times, provided music for the funerals of the Todas and Badagas. We witnessed a dance at Sholur. For this occasion the men were dressed in a garment with a swinging accordian-pleated skirt, like women. They wore bright coloured turbans to which were attached the medals they had received in Government musical competitions.

A favourite method of early writers has been to compare the five tribes of the Nilgiris and describe their peculiar social relationships. The Todas and Kotas are usually compared and contrasted with the Kurumbas. Oppert (1896) suggested that the Todas are related to the Semites or African Ethiopians. This is not a very well-considered guess. The Badagas were said to fear the witchcraft of the Todas and often to murder them. On the other hand the Kotas do not fear the conjuring tricks of the Todas, while the Kurumbas are feared by all as sourcerers. How the Todas acquired their power and how they gained the respect of the other tribes is unknown.

Emeneau (1937) described the Kotas as a small tribe or caste of artisans and agriculturists. They have an annual religious ceremony from the time of the northwest monsoon to the time for ploughing and sowing, i.e. from October-November to March-April. There are four great festivals, religious rites occupying five days, followed by two days of social enjoyment, with a "dramatic

performance." In a later study Emeneau (1938) describes the immemorial connections between the Kotas and Kurumbas. He shows the effects which the creation of the hill stations, Ootacamund, Coonoor and Kotagiri, has had on Toda life. The social interchange between Kotas and Todas continues. The former supply music at funerals, also tools and pottery, and they receive the buffaloes killed at funerals. But the Badaga-Kota interchange has broken down because of religious changes in the Badagas. They no longer have music at their funerals, and now they get their tools and pots in the bazaars.

Other changes are taking place. A scheme to induce the Todas to grow potatoes has broken down because they do not like hoeing. It is too great a change from pastoralism. However, some Todas were employed on tea estates and some tended cattle in the Ootacamund area. But no great change has occurred in the Toda social organization. As the buffalo cult is highly ritualized, no change is likely here.

The Kota system of polyandry, which has probably been adopted from the Todas, nevertheless differs in various respects. A man's brothers have free sexual access to his wife. The brothers are in effect secondary husbands. Seven Kota villages are each divided into three exogamous father sibs. Residence is patrilocal. A man may have more than one wife. The arrangement is therefore one of true polygyny as well as fraternal polyandry. The resulting sib relationships may be complicated, Brothers share everything, including a wife. This is the principle of the equivalence of brothers. But the Kota priest and his (one) wife may have no other sexual relations. Widows may refuse to marry one of the deceased husband's brothers, and quarrels between brothers frequently occur.[4] The penetration of European culture to the Nilgiris has already changed other customs, but not polyandry. This is because groups of brothers generally work together in the smithy (where three are necessary), the fields or in musical bands of five. The Kota economy and social organization are thus vastly different from that of the Todas, who have changed much less in the last fifty years.

We have already seen that the Todas and Kotas do not differ markedly in anthropometric measurements.

Observations of the Kotas

In 1959 my wife and I measured 22 Kotas in their village at Sholur 12 miles from Ootacamund after traversing on foot a very

[4] Aiyappan (1937) says that polyandrous brothers are free from jealousy when the custom is practised in isolation, but jealousy begins when polyandry is influenced by European culture and monandry.

TABLE V

KOTAS

MALE

AGE	EYES	SKIN	HAIR	L	B	C.I.	NOSTRILS	EARS	LOBE	LIPS	BROW RIDGES	NAME	
30	3	nearest 5[1]	black, wavy	189	142	75.13	40.2	57 x 29	small	± everted	none	Desingh	
60	4	5 more red	black, balding in front	185	144	77.84	39.5	56.4 x 37	small		none	Gegmunklin	Fig. 4
60	3	5 more red		184	141	76.63	40	70.4 x 35.3	lobe		slight	Kabalan	Fig. 5
40	4	F 5 more red B 4	black, very slight wave	180	147	81.66	40	59 x 33.2	small		slight	Kanichar	
60	4	F 5 B 4[2]	greying	194	145	74.74	41	58.7 x 40	small		slight	Kablan (chief)	Fig. 6
50	5	F 5 B 4	black, greying	190	145	76.31	39	62.6 x 38.5	lobe, hairs in ear rims		slight	Sokola	Fig. 7
26	5	F B nr 5	black, wavy	186	147	79.03	44	60 x 36	lobe		none	M. P. Bellan	Fig. 8
28	4	F 5 more red B 4	black, wavy	185	144	77.84	41	62.3 x 34	small		none	Mundan	Fig. 9
60	5	F 4-5 B 4	grey	200	146	73.00	40.2	69.2 x 35.3	lobe		none	B. Bellan	Fig. 10
39	5	F 4-5 B 4	black	181	146	80.66	40.3	59 x 33	v. small		v. slight	K. Sallan	
50	5	F 5 B 4	black, grey, wavy	186	138	74.19	42	60 x 38	small		none	P. Sallan	
26	5	F 5 B 4	black, wavy	189	145	76.66	42.3	58 x 33.3	good		none	S. Puschen	
40	4	near 4	black, wavy	186	152	81.72	40.2	60 x 39.3	good		none	P. Bellan	Fig. 11

FEMALE

50	5	F 5 B 4	grey, slightly wavy	170	135	79.41	35.5	55.8 x 29.8	small	L. lip everted		Mahdi	Fig. 12
40	5	F B 4-5	black, slightly wavy	183	130	71.04	29.2	53 x 28	none		none	Pulmi Mahdi	Fig. 13
50	5	F B 4	grey	187	136	72.72	38.6	69 x 33.2	good	L. ± everted	none	Tansy	Fig. 14
14	5	F B 4-5	black, wavy	166	133	80.12	37.5	52 x 29.7	none		none	Rockmanni	Fig. 15
38	4	near 4	black, slightly wavy	185	135	72.97	39.5	60.2 x 34.6	small		none	Metashi	Fig. 16
20	5	4-5	black, slightly wavy	174	129	70.11	33.1	52.4 x 33.3	v. small		none	Seedii	Fig. 17
50	4	5	black, slightly wavy	178	139	72.47	36.6	62 x 29.3	small		none	Sinmore	Fig. 18
37.4		MEANS (7)		177.6	133.8	74.12	35.71	57.8 x 31.1					

[1] These numbers are from the Gates Colour Chart.

[2] F = face colour, B = body skin colour.

rough and stony road from the main highway. At the village was a stone wall enclosure for cattle, resembling that of the Todas, from whom it was apparently adopted. About thirty families live here in simple houses which have replaced the former huts. These Kotas are apparently being gradually transformed into a Hindu caste. The village at Kotagiri was not visited. It contains Kundas as well as Kotas.

This whole area is full of tea plantations on all the hillsides and in small places around great boulders. The red soil is also in cultivation. Barley is grown as well as wheat, but no rice. The Kotas also grow cabbages, potatoes and other vegetables. There are many large open grass areas, like the downs of southern England. These alternate with small forests in the depressions haunted by tigers.

Our records and photographs of 13 male and seven female adult Kotas were made under a great tree with spreading roots partly exposed. The ground was so irregular that it was impossible to measure the stature with only a steel tape, but the impression was definite that these Kotas were shorter than the Todas. The other measurements are in Table V. Most of the ages were rough guesses, the youngest being 26 and the oldest over 60. The eye colours were nearly all 4-5 of the Martin Augenfarbentafel, kindly loaned by Professor L. S. Penrose, F.R.S. Several of the children had hazel eyes.

In skin colour, the face is frequently a shade lighter than the body. The colour was very uniform, being generally 4-5 of the Gates colour chart, but sometimes more reddish. As one would expect, the shades of the colour chart only fitted the skin colours approximately, but near enough to make classification possible. The hair colour was black, becoming grey, with baldness developing in the frontal region. It is more or less wavy in form, but no case of curly hair was seen. Some Todas (*e.g.* Fig. 3)* have more closely wavy-to-curly hair than is to be seen in the Kotas. Both male and female Todas part their hair along the sagittal suture. The Kota women do the same, but the men pay less attention to the middle parting.

As regards head measurements, the mean head length of 13 men (Table V) is 187.3 cm., the maximum breadth 144.8, cephalic index 77.34, dolichocephalic. The C.I. however ranged from 73 to 81.7, which is a relatively narrow range. The mean nostril width is 40.7 mm., ranging only from 39-42.3 mm. The ears are rather small, 60.9 x 35.5 mm. A small lobe is nearly always present. In one man (Sokola, Fig. 7) there were hairs in the ear rims. This

* The Figures referred to appeared with the first part of this article in the last issue.—EDITOR.

condition was found in only the one case (see Gates 1961c). It was present, he stated, in his three brothers and their father. Probably it arose from ancestral contact between a Kota woman and a Toda man with hairy ears. The lips are occasionally ± everted. Two of the women have the lower lip everted, a condition which is inherited as a simple unit in various races (Pfannenstiel 1952). The brow ridges of the Kotas may be absent or slight, but frequently the orbits are considerably sunken (see Figs. 4-10).

The photographs of a number of these villagers were taken (Figs. 4-18), many of them holding some object for purposes of identification. The white "shawl" in which they wrap themselves was evidently adopted from the Todas. These have a few long red stripes and are occasionally (Fig. 6) embroidered by the women. Many of these shawls are made in Coimbatore. In a preliminary account of the tribes of South India (Gates 1961a) the Kotas were regarded as "evidently an offshoot from [the Todas], probably within recent centuries." That this view is quite erroneous, being based partly on similarities in clothing, is shown by the accounts of Shortt and others written nearly a century ago, and also by the blood groups.

In Table VI the ABO blood groups of the Todas and Kotas are compared. They are extremely different. The two sets of tests for the Todas differ, especially in the O and B. On the other hand, the two results for the Kotas are extremely similar, but at the same time very widely different from the Todas. The A gene is nearly but not quite entirely absent, as compared with 15-20% in the Todas, and the O gene is three times as high in the Kotas as in the Todas. In the light of such extreme differences, any hypothesis of common origin is ruled out. The Kotas have rather adopted various Toda customs during the last century, but apparently without any appreciable amount of race crossing. Imitation of the Todas by the Kotas has led to a superficial appearance of near relationship of these two tribes, which is quite belied by their earlier dissimilarity in customs and by the great differences in such features as stature, weight and blood groups. This imitation appears to have taken place mainly during the last century.

TABLE VI

BLOOD GROUPS %

	N	O	A	B	AB	AUTHOR
Todas	200	29.5	19.5	38.0	13.0	Pandit 1934
	82	12.2	14.6	54.9	18.3	Lehmann & Cutbush 1952
Kotas	86	60.4	—	39.6	—	Lehmann & Cutbush 1952
	56	57.2	—	39.3	3.5	Sarkar 1959

As regards colour-blindness, Thurston (1909) found no case in 121 Kotas. However, Sarkar (1959) examined 28 males and 11 females for red-green colour-blindness, finding that 17 males and 6 females were colour-blind, *i.e.*, 60.7% males and 5.4% females. Apparently inadequate methods led to these extremely diverse results. Rivers (1906) recorded colour-blindness in 12.3% of male and 1.1% of female Todas. So it cannot be determined at present how great is the difference between the two tribes in this respect.

The important paper of Lehmann and Cutbush (1952) also showed that the gene for sickle cells was present in 4% of 84 Todas, but was absent from 86 Kotas tested. This is the reverse of what might be expected, unless the Todas brought the sickle cell gene with them from the Middle East. Lehmann's hypothesis that the gene originated in the Middle East in prehistoric times and spread from there west into Africa and eastwards into India fits this situation if the Todas came from the Middle East, as appears probable on other grounds. But if the Kotas are plains people formerly living, like the Paniyans, Irulas, Kurumbas and Badagas, in malarious regions, they would also be expected to have the sickle cell gene. In the four tribes just mentioned the frequency of sickle cells ranged from 34% in 124 Irulas to 8.4% in 191 Badagas. On the other hand it was absent from all the Canarese, Telegus, Malayalis and Tamils tested (about 100 in each), many of whom must live in malarious areas. It therefore appears that the distribution of sickling can only be explained in Africa as an adaptation to malarious conditions because the heterozygote is more resistant to malaria than either homozygote, but in India this explanation is uncertain.

In conclusion, it may be said that the Todas stand so widely apart from all other tribes in India, both physically and culturally, that their origin could be most naturally explained as a group from the Mesopotamian region which had arrived as traders on the Malabar coast direct from overseas and had later taken possession of the Nilgiris without any intermixture with other tribes. They have thus retained their ancient milk rituals with the greatest tenacity and avoided miscegenation.

The Kotas, on the contrary, appear to have originated as a plains tribe of the Malabar coast, perhaps from farther north in India. That they were originally very different from the Todas is shown not only by the blood groups but by their food customs and religion of a century ago as well as by certain physical character differences. A remarkable feature of their more recent history has been the adoption of the Toda mantle and the cattle enclosures, although their way of life as artisans and agriculturists and their subservience to the Todas make them only superficially like this master race of the Nilgiris.

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The Scientific Racism of Juan Comas

By HENRY E. GARRETT

The October 1961 issue of *Current Anthropology* carries a paper by Juan Comas entitled " 'Scientific' Racism Again?" This paper is an attack on an article written by me for the July 1960 issue of THE MANKIND QUARTERLY and is, inferentially and more importantly, an attack on THE MANKIND QUARTERLY itself. Apparently Comas has given what he considers to be the case for equalitarianism, that is, a defense of the cultural hypothesis as the chief explanation of racial differences. Sol Tax, the editor of *Current Anthropology,* invited comments on Comas' paper and following his article printed 21 statements by various scientists.

As one of the commentators, I have already expressed my views of Comas' evidence and of his methods of presentation in some detail. These remarks will not be repeated here; the interested reader is referred to *Current Anthropology.* Presently, I would like to clarify what I believe to be certain misconceptions and errors in the statements of several commentators. But before doing this, I want to make clear (1) just what my paper undertook to do in order to give my comments a proper setting. And further, I want to offer (2) a few remarks on the ambiguous use of the terms "racist" and "racism" so freely employed by Comas and some of the other equalitarians.

(1) In my original paper,[1] I attempted to show that the *evidence* presented by Klineberg to "prove" the non-existence of racial (really Negro-white) differences in mental ability is meager, often misinterpreted, and is woefully inadequate to sustain his confident assertion that "The scientist knows of no relation between race and psychology." I did not espouse any "racial superiority" doctrines; but I did show (I think conclusively) that the data cited by Klineberg often revealed differences where he found none. (It is significant that none of the commentators rejected my criticisms: they simply disagreed with me.) Proper criticism of my paper would have pointed out the fallacies in my argument and

[1]Henry E. Garrett, "Klineberg's Chapter on Race and Psychology: a review." MANKIND QUARTERLY, Vol. I, No. 1, July 1960.

shown where Klineberg was right and I wrong. Instead of doing this Comas, perhaps as the safer approach, launched into a diatribe accusing me of racism, of championing racial discrimination, of racial propaganda, etc. Comas' published paper is still confused, but is much better than the manuscript upon which I was asked to comment.

(2) I confess that I am puzzled by the loose way in which the equalitarian uses the terms racist and racism. I had always thought that a racist was one who believed in the general superiority (with respect to intelligence, character, religious worth) of some ethnic group—usually one's own. Others were considered to be outsiders, to be treated as inferiors, and with contempt. Under this definition, Hitler was a racist and the phrases "Nordic Supremacy" and "Chosen People" describe racist views. When used with reference to such views or beliefs, the term racism is intended to be belittling and opprobrious. But suppose than an investigator reports differences between Patagonians and Pygmies in certain "culture-free" tests; and concludes that in his opinion these differences are not primarily determined by culture. Is he then a racist? He is, if the term is being used simply to describe a person who reports differences which he believes to be at least partly native and genetic. Porteus writes on this point: "To the extent that they (anthropologists and geneticists) agree that differences do exist between racial aggregations, they are racists. I certainly would not personally, and in the same sense, disclaim the designation . . ." Nor would I. Unfortunately, all too often the term racism is used by the equalitarian as an epithet to denigrate, frighten or suppress; not as a description of a point of view.

Of the commentators who agree generally with Comas—take the equalitarian point of view—six (Boev, Bunak, Pospisil, Skerlj, Thoma and Wiercinski) live in Communist countries and their statements are colored by ideological and political considerations not necessarily related to science or to scientific evidence. The Communist scientist is not a free man; and equalitarianism is good Communist dogma. Of other commentators who agree more or less with equalitarianism, I should like to expand briefly on the remarks of Dobzhansky, Haldane, Huxley and Montagu.

THEODOSIUS DOBZHANSKY. There is no evidence in his statement that Dobzhansky has read my paper or even seen THE MANKIND QUARTERLY. Nevertheless, he states firmly at the outset that "Faced with a revival of 'scientific racism,' one is tempted to treat the matter with the silent scorn it so richly deserves." As my paper

was concerned solely with a critical examination of Klineberg's evidence, Dobzhansky's silent scorn seems to be directed more toward suppressing free discussion than ferreting out the facts. Such an attitude is rarely found in a scientist, fortunately, but it is the trade-mark of the propagandist. Carried to its logical conclusion, Dobzhansky's "silent scorn principle" would suppress all critical studies of racial differences which were not equalitarian-oriented from the start.

Dobzhansky's statement that all men are members of *homo sapiens* and hence in some sense "equal," does not gainsay the fact that through "genetic and cultural diversity" (his terms) some groups come to differ markedly from others as witness the Eskimo, the Congolese, the Filipinos.

To take an illustration from below the human level, all modern horses, I believe, are descended from a common four-footed ancestor. But the pedigreed race horse through selective breeding and "cultural diversity" is quite different from the plow horse, though both are undeniably horses. Perhaps the race horse owner who claims his animal to be superior to the plow horse, should be called an "equine racist" and accorded Dobzhansky's not-so-silent scorn.

Two quotations reveal how muddled is Dobzhansky's thinking when he gets away from fruit flies. He writes: "All healthy individuals of *homo sapiens* have a capacity to acquire a culture, any one of the cultures that mankind has developed anywhere." This statement is, of course, unproved and unprovable. Perhaps the Congolese have the *capacity* to develop a culture equal or superior to that of the British; and they may do so in several thousand years. But the probability is miniscule in view of their past. Today after nearly 6000 years of history, the Congolese culture is certainly "inferior" to that of the British by any reasonable standards. Again Dobzhansky writes: "It is only with a reasonable approach to an equality of opportunity that genetic differences between individuals and populations can become clearly manifest. Inequality of opportunity hides, distorts and stultifies differences." The term "equality of opportunity" is a catch phrase which sounds well, but often has little meaning. It would take many years to provide Swedes and Bantus, for example, with anything approaching equality of opportunity. Giving two children the same task does not equalize opportunity if one child has an IQ of 80 and the other an IQ of 120; or if one is partially deaf and the other normal. Instead of talking of equality of opportunity, we should strive to provide for everyone an opportunity commensurate with his abilities and suited to his needs.

J. B. S. HALDANE. Haldane admits that he has not read my paper nor seen THE MANKIND QUARTERLY. He writes: "I am inclined

to believe that there are innate statistical differences in various capacities between different human races—but I have no idea which races are superior or in what respects. It seems equally irrational to believe in inequality on the evidence before us, or in equality on *a priori* grounds . . ." Except for the fact that evidence for inequalities in ability is far stronger than Haldane surmises, this statement is a fair one.

SIR JULIAN HUXLEY. Huxley says that he "profoundly disagreed" with my paper, but he doesn't say why. Did he disagree with my interpretation of Klineberg's data? Or with the statistical analysis? Except for this generally negative reaction, Huxley is quite critical of Comas for misuse of terms, overstatement and the like.[2]

M. F. ASHLEY MONTAGU. Montagu can always be counted on to spring to the defense of equalitarianism, but his spring in the present instance is not very lofty. He agrees wholeheartedly with Comas (which is certainly not surprising), but feels it necessary to supplement him at some length. Montagu prefers the anecdotal and impressionistic methods used so successfully by the social anthropologist Margaret Mead in her popular "growing up" books. But he will make use of mental tests when they seem to serve the cause of equalitarianism.

As a first exhibit, Montagu brings out the time-worn data from the Army Alpha test given to soldiers in World War I. Army Alpha, it may be remembered, is a language test of general intelligence administered some 40 years ago to American soldiers who could read and write. Montagu reproduces a table to show that Negroes from four Northern states (Ohio, Illinois, Indiana and New York) did as well or slightly better on the average than whites from several Southern states. These data were first assembled by Klineberg, and were widely interpreted to mean that on the average the Northern Negro is as intelligent as (or more intelligent than) the Southern white. To his credit, Montagu rejects this inference (it must have been hard for him) and attributes the test differences to educational, social and economic factors—the cultural hypothesis.

The only sure conclusion that one can draw from these Army test data is that they are unsuitable for racial comparisons. Reasons are as follows:

(1) The samples are small (there were only 152 Negroes in the Ohio group) and the degree of selection is unknown. Hence, these groups do not represent any definable populations.

[2] Slipshod work is characteristic of Comas. See A. J. Gregor, "Comas' Chapter on Racial Myths: a review." MANKIND QUARTERLY, Vol. II, No. 1, July, 1961.

(2) Alpha test score differences are confounded with educational differences. For the country as a whole, about 15% of Negro soldiers scored above the white median. The correlation of Alpha and schooling was about .70, and it is a fair assumption that educational opportunities in 1917-18 in the Northern states were better on the whole than they were in the deep Southern states. Hence, the better educated Negroes from Ohio, New York etc. will be at the top of their Alpha distribution; and the more poorly educated whites from the deep Southern states will be at the bottom of their Alpha distribution. It is easy, therefore, to select Negroes from the top of their Alpha distribution who are ahead of whites from the bottom of theirs. One might reverse the argument and contend that poorly educated white Southerners did as well as the better educated Northern Negroes despite the educational handicaps which unfortunately affect whites as well as Negroes.

(3) There is a positive correlation between skin color and Alpha scores. In one camp (Lee), for instance, light skinned Negroes averaged 50 on Alpha, dark skinned 30. If the 152 Ohio Negroes who scored highest in their group had considerable white ancestry, this factor alone would have accounted for their relatively high scores.

(4) When Northern Negroes are compared with whites from the *same* state, they lag behind to about the same degree as in the country as a whole. Given better schooling, then, the Negro does indeed improve his test score—but not his position relative to the white.

This last finding is buttressed by data from the Army General Classification Test administered to 12,000,000 soldiers during World War II. Much of the data on these tests has not been released. But from what we have, it appears that the Negro did no better relative to the white in 1941-45 than in 1917-18. In one sample of 550,000 soldiers, both Negro and white, classified by educational levels,[3] we find that 24% of the white soldiers who had completed grade school scored in the upper two levels of the AGCT test as compared with 4% of Negro soldiers. Only .4 of 1% of college trained whites scored in the lowest two brackets of the test as compared with 14% of college trained Negroes. Montagu omits the more recent AGCT data, perhaps because it does not fit the equalitarian pattern.

The Army Alpha data from World War I were incorporated

[3] R. K. Davenport, "Implications of military selection and classification in relatiion to universal military training."*Jour. Negro Education*, 1946, 15, pp. 585-594.

into a pamphlet entitled *Races of Mankind* and published in 1943 by two authors, Ruth Benedict and Gene Weltfish. Ostensibly this pamphlet was for the edification of the Armed Forces. Actually, it was so blatant a piece of equalitarian propaganda that it was withdrawn after a storm of protest. Montagu remarks with unconcealed satisfaction that Andrew J. May, the congressman who instigated proceedings against the pamphlet, spent his last days in jail for cheating on government contracts. To round out the story, Montagu should have added that one of the authors (Weltfish) was subsequently ousted from her lectureship in anthropology at Columbia University presumably for tenure reasons. The fact that Weltfish is an active and aggressive Communist who announced publicly that the American Army had used germ warfare in Korea, and that Columbia was deluged by the alumni with demands for her expulsion, may have played some rôle in her involuntary retirement. As for the senior author (Benedict), it is perhaps enough to say that she was one of Boas' clique, as is Montagu.

As a second exhibit, Montagu presents some high rank-order correlations between (*a*) medians on Alpha and Beta tests by states for Negroes and whites in World War I, and (*b*) annual educational expenditures and per capita income in these same states. These data are intended to show that intelligence test scores are determined by cultural factors. Again the argument is poorly based. Correlations between averages are spurious and usually inflated. Any two hodge-podges will correlate if they contain enough overlapping factors. Undoubtedly a good cultural environment will enable a man the better to express what abilities he possesses. The bright child may achieve a low score on a test because of timidity, negativism or over-indulgence at home. No one disputes this. But the dull child will not test bright no matter how good the environment.

As a third exhibit, Montagu takes me to task for quoting Davenport and Steggerda on the disharmony of racial crossings. Like Comas, Montagu heartily approves of race mixture, as I suppose most equalitarians do. I did not claim that all racial crossings are disadvantageous: it depends on what is crossed. In commenting on Comas' paper, I wrote: "I would agree that racial mixing is sometimes advantageous, that the resulting hybrid may be physically attractive (for example the Chinese-Hawaiian crosses) and apparently intelligent. But this does not mean that widespread amalgamation of Negroes and whites is desirable or morally imperative. . . . Should white Americans under the emotional goading of various pressure groups become convinced that it is their 'duty' to absorb the Negroes now living in this country, our culture would inevitably deteriorate intellectually, morally and materially. It is too great a risk . . ."

Montagu introduces his final paragraph with the rhetorical question: "Why is it that Garrett and others like him are so anxious to prove the Negro inferior?" This is a thoroughly dishonest question as it assumes as a premise that I *want* to "prove" the Negro inferior. This is untrue and I suspect Montagu knows it is untrue. The available evidence shows that the American Negro is equal or superior to the the American white in many physical traits; that he often excels in sports, in certain forms of entertainment and music. In mental tests, under a variety of conditions, the the Negro regularly and persistently falls below the white in the ability to reason, solve problems, comprehend difficult abstractions. Any attempt at social change must fail if it does not take account of these stubborn facts. He who would force a social change must bear the burden of proof in justifying that change, not *vice versa.* It is idle to argue that all members of *homo sapiens* should be treated as individuals regardless of race. If "no man is an island," neither is any man strictly speaking an individual except in a sort of disembodied sense. Every person brings with him his race, his color, sex, age, education, inherited dispositions and mores. One can no more get away from the fact that A is a Negro and B a white man than one can ignore the fact X is Swedish and Y Italian.

We may reverse Montagu's question and ask: Why are Montagu and other equalitarians so anxious to force amalgamation of American Negroes and American whites? For despite all protestations of virtue, tolerance, kindness and what have you, this is their obsessive goal. Many equalitarians are undoubtedly genuine humanitarians. Others believe that we must outdo the Communists in wooing the new pseudo-nations in Africa into believing it is possible to equate savagery with civilization. Still others, mostly members of minority groups, seem willing to destroy Anglo-Saxon civilization because of real or fancied grievances.

In closing I would like to quote from a letter recently received from a missionary who has spent the past 14 years among the Zulu. He writes: "This nation of Zulus, which grew up without towels, handkerchiefs and toilet paper, has never discovered the principle of the wheel, developed any lighting equipment, irrigation canals, systems of writing, terraces, or bridges; has never used an animal for draught or as a beast of burden . . . Believe me, the Negroid nations will forever be a liability and must be 'looked after.' . . . It is a crime that U.N. scientists have artificially created non-existent talents for African natives. This may well lead to their own destruction and to the peril of the white race. . . ."

These Africans are blood brothers of the American Negro whom Montagu and his friends want European-descended white Americans to absorb.

Progress of Anthropology in India since 1938

Part I

By B. S. GUHA and A. K. MITRA

In the report on the progress of anthropology in India for the 25 years ending in the year 1937, written by one of us (Guha), it was indicated that systematic intensive studies on special ethnic groups began about this time, after the period of compilation of descriptive memoirs on the tribes and castes enunciated by Risley.

The most important development for carrying out systematic investigations in anthropology during the period under review was the expansion of the anthropological section of the Zoological Survey of India into its present position as an independent department on the basis of a scheme prepared by Col. R. B. Seymour Sewell, F.R.S. (former Director of the Zoological Survey of India), and Dr B. S. Guha, embracing the different branches of Physical and cultural Anthropology. Not only was provision made for up-to-date laboratories in Physical Anthropology, but well-equipped laboratories in Experimental and Social Psychology, Nutrition and Radiology, and a Sound Chamber, were also set up to study the deeper emotional factors in determining social behaviour, the nutritional values of food taken by primitive tribes, patterns of growth, the ages for maturation of bones, and the morphology and sound forms of Indian languages. The integrated study of human life and behaviour as envisaged in the scheme has been on the most modern lines and surpasses anything yet attempted in this country. In furthering the cause of systematic studies among the primitive tribes in the more outlying parts of India, a sub-station was established in the Andaman Islands and another for the Assam Tribes at Shillong. Universities have also taken up the teaching of Anthropology more earnestly, and in several of them papers in Social Anthropology were included in their curricula, notably in Lucknow, Bombay, Mysore, Madras and Poona. A department of Social Anthropology was established in Osmania University, Hyderabad, and another at Delhi University comprising both the physical

and cultural aspects. Lastly the newly started Gauhati University in Assam included Anthropology as one of the subjects for the B.A. and B.Sc. examinations in consideration of the importance and place of tribal people in that state. The period following 1938 may therefore be regarded as heralding increased interest in anthropological studies and affording provision of better facilities for its teaching and research in this country. In the following pages progress achieved in the different branches of anthropology is discussed.

PREHISTORY

The most important work in Indian Prehistory was published during the period under review, namely De Terra and Paterson's monumental work (1939) on *The Ice Age in India and Associated Human Cultures*. This was based on intensive field work, but the chronology proposed varied from that adopted by the Geological Survey of India, particularly in the definition of the Pliocene and Pleistocene boundary lines among other things, and did not receive unreserved acceptance on all hands. (K.S.S., 1940; Guha, B. S., 1940; Wadia, D. N., 1940). With the passing of the decennium, however, opposition seems to have died out. (Wadia, D. N., 1951; Sankalia, H. D., 1951).

Next to it in importance must be mentioned H. L. Movius' account of Early Man and Pleistocene Stratigraphy in southern and eastern Asia (1944). Movius emphasized how at Chauntra the Early Soan culture and the Abbevilleo-Acheulean complex developed on parallel lines until the third Inter-glacial Period when the two cultures, the one having affinities with the Far East, the other belonging to another horizon in Peninsular India, the Near East, Europe, and Africa, became mixed with each other. Movius traced the affinities of the Early Soan with the Choukoutien of N. China, the Patjitanian of Java and the Tampanian of Malay. According to him the Levalloisean technique was closely associated with the Abbevilleo-Acheulean complex, with the exception of Punjab, and was absent in eastern Asia. Like Hooton, he thought it probable that this difference was due to the authors of the cultures in question having belonged to a different branch of the human stock from that found outside the Far East, represented in the Pithecanthropus-Sinanthropus stage of physical evolution. Le Gros Clark (1946), in his excellent review of the work of Movius, notes "two points which perhaps tend to lessen the force of the argument" supporting the distinction between the Asiatic "Chopper-Chopping Tool Complex" and the hand-axe complex of Europe, Africa and southern India. "One is that in the northern Punjab a typical Lower Palaeolithic hand-axe complex is actually found in

the same deposits (of second Inter-glacial period) in association with the Early Soan Chopper-Chopping tool culture. The other is that the Patjitanian of Java does in fact include hand-axes, though the latter occur in relatively small numbers (only 6.2 percent of the total series) and are said to show certain distinctive features suggesting an independent local development."

Le Gros Clark however demurs from the view that the Chopper-Chopping culture was due to men of a physical type different from that found elsewhere and recognises in the Pithecanthropus a generalised ancestral form from whom the Homo Sapiens everywhere initially had involved. An important feature of the period under review was the disappearance of the hiatus between the Palæolithic and Neolithic industries deduced by Bruce Foote from his studies of the Sabarmati Valley earlier. In 1941-42 a reconnaissance survey in this region came upon undoubted artifacts of Abbevillian and Acheulean types as well as some microliths (Ghosh, B., 1941-42). The area appeared to be a meeting ground of Soan and Madras industries of the Mid-Pleistocene, and what Bruce Foote had thought to be Neolithic proved to be Mesolithic-Microlithic. In the account of work undertaken by the Deccan Institute at Poona in the same area at the Langh Naj site in 1944-45 (Sankalia, H. D., and Karve, I., 1949) are described not only artifacts but also skeletal remains of the dog, horse, pig, and cattle, while five feet below the surface were several human skeletons. One of these is claimed by the authors to have Negroid affinities, but one of us (Guha) who had the chance of examining the skeletons at the Deccan College, Poona, is of the opinion that they rather showed Proto-Australoid affinities similar to the Bhils and other aboriginal tribes of central India. The skulls appear to be of the dolichoid type. There was neither pottery nor metal. In this connection reference should be made to the work of Todd on a microlithic site on an island close to the city of Bombay. Associated with the microliths is a heavy industry in which wedge-shaped choppers are found together with a mace and axe-culture complex. There seems to be some affinity with the Indus Valley in this respect which decreases as we proceed further south. The industry is dated *c.* 500-200 B.C. (Todd, K. R. V.).

D. H. Gordon (1950) has shown that Indian Microlithic Cultures follow upon a blade-using Upper-Palæolithic complex. Microliths continued to be in use for a considerably long period, well into the Neolithic time, along with the introduction of pottery and agriculture and, where polished Neolithic celts are absent, they remain the type-tool along with bone implements and the earliest traces of copper. Wheeler's work (1947-48) in Mysore State showed a stone axe culture, which may go back to 1000 B.C., accompanied

by crude microliths and copper objects with hand-made pottery. Indeed Gordon thinks that a greater part of Peninsular India was in a microlith-using mesolithic or neolithic stage of culture from relatively remote times and continued to be so while the Chalcolithic culture was reigning in north-west India. Our knowledge of Indian microlithic cultures is still incomplete and excavations in eastern India may help to fill up some of the gaps. There is for example the well-known site of Bonaikola on the Kharkai river in Mayurbhanj, from which Dr Mitra collected a large number of microliths along with fragments of pottery which have been deposited in the Khiching Museum. The site is still extant notwithstanding depredations by the Public Works Department for road-making purposes and is likely to yield valuable information. The sequence of blade-using upper Palæolithic-Mesolithic-Neolithic as found in western and southern India has yet to be tested in the eastern parts of the peninsula.

A discovery was reported from Mayurbhanj of Palæolith-like implements, some on the surface and some in situ. They are described as being in the lower Palæolithic bifacial hand-axe tradition but the excavators did not attempt to correlate them with specimens from other parts of India by reference to the geological strata (Bose and Sen, 1948).

Very interesting evidence regarding the chronology of Indian Stone-Age cultures has however come from Ceylon, from the Ratnapura area. Ceylon, of course, had no glacial age. As a consequence, as P. E. P. Deraniyagala (1935, 1939, 1942) points out, certain epirogenetic movements and fluviatile and lacustrine deposits have to be considered in estimating the age of finds, with the result that a new system of classification, partly natural and partly arbitrary, is employed for determining the sequences of typology. In Ceylon some of the oldest finds are from the Greensand of the Ratnapura Valleys. At present two strata are clearly recognised—Ratnapura 2nd and 3rd. In the lower levels are artifacts, which are crude and akin to the earlier Soan types. In the same layer remains of the extinct hippopotamus and the anthraptheriidae have been found. These had disappeared from the Siwaliks and Java and consequently we have an idea of their date. The subsequent phases resemble the Abbevillean, Acheulean and Levallois phases of the European Palæolithic culture. From these discoveries Ceylon is now proved to have had a phase of the Neolithic culture, as judged from the Balangoda caves, etc. The deposits extend from 30 cm. to 1.8 metres below the surface and are characterised by polished celts in the upper reaches and pygmy artifacts all along the culture strata.

NEOLITHIC INDUSTRY

Whatever may have been the physical type of Man responsible for the lower Palæolithic industries of the Punjab, Narbada and Madras, there still remains the question as to when the modern type of man made his first appearance in India. The Langhnaj finds are certainly those of modern man and the Microlithic industry of India must be held to be Neanthropic. We have already mentioned the overlapping of the Microlithic with a heavy industry found by Todd at one end and with the Neolithic in southern India at the other, as suggested by Wheeler. The association of Microlithic with Neolithic elements "such as delicately chiselled arrow-heads, knives, axes, grind-stone and potsherds" is characteristic of the Mongolian border lands, Manchuria and Outer Mongolia and is in striking contrast with the western Microlithic. Indeed the Mongolian Microlithic culture has been found to have had a double horizon, a Mesolithic and a Neolithic one (Maringer, I., and Bergman, F., 1950). This seems to be true also of India where there are horizons associated simply with pottery, so that the Microlithic industry must have passed through various phases of history (Todd, 1948).

No less interesting is the history of the Neolithic which continued well into the historical period. Gordon attempts to show how at Maski, Hyderabad, it was associated with the Chalcolithic of the Indus Valley and the Indo-Iranian border-land. The lower limit of the Neolithic is determined by several discoveries, one of which is the Menhir site at Burzahom, in Kashmir where De Terra found a weathered loess stratum overlaid by another with highly polished black ware and potsherds with incised geometric designs which he assigned to 3000-800 B.C., while the uppermost layer belonged to the 4th century A.D. De Terra recognised that it was hardly possible to make a reliable guess at the age of this loess culture, but Gordon makes the interpretation that the Burzahom culture must have started as early as 1200 B.C. At Brahmagiri, Wheeler found a stone-axe culture of two phases, the later overlapped by an iron-using intrusion about 200 B.C. and the earlier and lower ranging back to 1000 B.C. It is interestiing to find that the stone-axe culture is not represented in Peshawar and neighbouring districts in the West Punjab round Rawalpindi, Cambellpur and Jhelum, Gujrat, parts of the Narbada basin and the Bombay-Poona area. A pointed-butt axe is however known from Shadipur, 21 miles south-west of Attock. At Burzahom, De Terra found in the loess a rectilinear type of tool, while among the surface finds was one of the trapezoid and another of the rectilinear type. Chipped and polished axes of the "Walzen Beil" type are reported

by the Sino-Swedish expedition as well as square-cut axes, and a look at the map for the site of Burzahom raises doubts as to the probable origin of all these finds. Wheeler in an appendix to the report on Brahmagiri and Chandra Valli reproduces a map showing the distribution of the pointed-butt type, many of these specimens being surface finds. The excavations of N. K. Bose at Kuliana in Mayurbhanj, where this type of axe was found in the thin clay-cap overlying the laterite bed, suggest its extension to the north-east. D. Sen's finds (1948, 1950) in Singhbhum and in the Midnapur District, West Bengal, may be mentioned in this connection. Gordon mentions that the pointed-butt ground or polished stone-axe came from the north-east much later than the copper flat axe from the west, and points out that the excavations at Maski and Kallur do not bear out the idea of evolution.

The flat axes of quadrangular section, "Vierkantbeil" or quadrangular adzes as they are called, present one of the intriguing problems of Indian Prehistory. The only map to our knowledge published so far giving their distribution is that of Heine Geldern (1932). This is one of the chief Neolithic industries of south-east Asia and is characteristic of the Yang-Shao or late Neolithic culture of China as well as those of southern Manchuria and Korea, as known from the Chinese Provinces of Schensi, Schantung, Fengtin and Yunnan. From the latter regions it appears to have wandered south and eastwards as well as to the west into India where Heine Geldern noted its presence in Chota Nagpur and Santal Parganas reaching India through Burma and Assam. Bose found at Kuliana one of these Eastern straight-sided axes. A flat-sided type or subtype is recorded by Wheeler from Brahmagiri. Another from the Shevaroy Hills has long been known. In eastern India, Chota Nagpur and Mayurbhanj, the quadrangular adze culture appears to have mixed with the shouldered-celts culture known from Godabari, Orissa, Chota Nagpur, Bengal, the Allahabad region and the Naga Hills of Assam. The distribution of the type in the Far East is very well represented in Heine Geldern's map. The latter thought that the northernmost penetration of this type was in the southern boundary areas of Yunnan. The area of distribution of the shouldered-celts lies within that of the Austro-Asiatic language zone. The two cultures appear to have been originally distinct and crossed only in further India and eastern India. The mixed form and distribution of some of the east Indian shouldered-celts suggests not only a mingling of the two cultures but also a wandering of Neolithic peoples from the north-east which might have been responsible for the introduction and spread of the present Mundari languages into India. But there is the evidence from Brahmagiri which indicates that this migration was com-

paratively recent and probably not a Mongoloid intrusion at all. How far this actually penetrated to the south and whether it arrived at Brahmagiri by the land route is not known.

MEGALITHS

Megaliths comprising rough standing-stones, cromlechs or circles have been known to Indian archaeologists for nearly a century and comprise one of the most important relics of pre-Aryan Indian times. They have been reported from as far west as the North-Western Frontier Provinces to the Deccan and Peninsular India, where the largest numbers occur, and as far east as Dimapur and parts of the North-East Frontier Agency. A large mass of material concerning these has already been accumulated. We will deal here only with recent studies of which the following invite particular attention: from Haji Allahdino, 20 miles east-north-east of Karachi (Wheeler, 1950); from Burzahom in Kashmir, from Gujrat on the outskirts of the Runn of Cutch (Pandya); from Bhosari near Poona (Sankalia); from the north and west of India. Also worth mentioning are finds in the Deccan, Carnatic and Cochin (Sankalia, Sen Gupta, 1939-40, II, Parts 1 and 2). Reference has already been made to Wheeler's excavation of Brahmagiri and Chandra Valli (1947-48). V. D. Krishnaswami (1949) attempted a classification of South Indian Megaliths on the lines proposed by Clark, while K. R. Srinivasan brings together references from early Tamil literature on the megalithic monuments and Urn-fields (1946). Suggestions have been made by Fürer-Haimendorf (1945) about their origin. He also attempted to trace the survival of megalithic rituals among the Gadabas and Bondo of Orissa (1943). This latter aspect was also dealt with by Verrier Elwin (1945) among others. It is further possible to recognise some relations with the quadrangular tumulii of the Westerners and the round tumulii of the Easterners mentioned in later Vedic literature (Chanda, 1916) which has survived in the two different types of stupas in early historical times.

The Mediterranean affinities of some of these megaliths were pointed out long ago by Elliot Smith (1929) and this would apply also to the megaliths of the Far East. The question of their source of derivation in India assumes great importance when we recall that this country was open to influences both from the West and the East. It was, therefore, quite appropriate that a survey and systematic excavation should be made of them in India which attracted early attention from Meadows Taylor, Hurst and others (Guha, B. S., 1935). A comparison of Smith's figures 55 and 56 and Krishnaswami's Plate XVB which shows the port-hole cist at

Brahmagiri, Mysore, brings out the Mediterranean affinities. From a comparison of the South Indian monuments and the monuments of north eastern India, Krishnaswami infers that several megalithic waves must have reached India both from the West and the East probably from Neolithic times. According to him "Indian Megaliths seem to be essentially rooted in the Iron-Age, supported as it is by the Brahmagiri excavations in 1947; and while structurally there seems to be some link between the south Indian and the Mediterranean megalithic cultures in their architectural features and 'port-holes' etc., none of these is patent in the megaliths of north-east India." It is not impossible however that the megalithic cultures of south-east Asia and Oceania can be traced to a common origin in the Mediterranean area or elsewhere and the north-eastern drift, if actually different from the western, owes its difference to its secondary derivation. The Prehistoric Archaeology of Further India and the Far East has been put on a surer foundation by the efforts of Heine Geldern (1945), and if his views are correct there appear to be two megalithic cultures. Of these the older megalithic culture entered south-east Asia along the river valleys (2500-1500 B.C.) as part of the Quadrangular Adze culture. Associated with it was the "planting of rice and millet, the special form of reaping knife used for harvesting rice, the brewing of beer from rice or millet, the raising of pigs, the raising of cattle or buffoloes for sacrificial purposes, a certain kind of technique for producing pottery, the manufacture of bark-cloth, the rectangular pile houses, the custom of head-hunting, the custom of erecting megalithic monuments as memorials of sacrificial feasts or as memorials to the dead" etc. The out-rigger canoe and geometrical ornamentation such as rosettes, lozenges, symbols of the sun and moon, carved cattle-heads, pigs' heads, etc., are also included. This older megalithic culture is alive in pure form in Assam and the Nias Islands and in a less vigorous form in the mountains of Annam and parts of the Malaya Archipelago. There are also some special notions concerning life after death which resulted in the characteristic megalithic ritual. The younger megalithic culture entered south-east Asia along with the Dong-Son Bronze Age culture. In the centuries around the beginning of the Christian Era (Heine Geldern, 1947) certain Kuki objects are presumed to show Dong-Son influences in their decoration but the designs of the Nagas as well as the Mon-Khmeer tribes along the routes from north-western Indo-China are of the older megalithic type. Characteristic monuments are stone cist graves, dolmen-like slab graves, stone sarcophagi and stone vats. Menhirs and ancestor figures of the older megalith were not discontinued. Stepped Pyramids are absent in south Sumatra, Java and Bali. The graves

are associated with Bronze objects, while in the Malaya Peninsula, and some of the graves of Java, iron tools are present like those of south India. Stone vats are found in the Central Celebes and in Upper Laos, and stone sarcophagi supported on stone pillars with human sculptures are known from Borneo, while rock-cut chamber graves are found here and there in Java, Borneo and Sumatra as in Nias. The younger megalithic culture survives in mixtures with the older megalithic culture. One recalls however that Rea found a group of Neolithic pyriform tombs adjacent to and partly underlying a small stupa close to the main stupa of Amaravati and probably contemporary with it *c.* 200 A.D. or earlier. The Urn burials may belong to a period somewhat previous to the Christian Era (Rea, A., 1908-9). Reference may also be made to the legged terracotta sarcophagi and the pyriform urns of Chingleput. It is not unlikely that these represented an infiltration of the younger megalithic of south-eastern Asia, which need not have taken place along the land route. While it is not possible to enter into details about all the problems connected with the megalithic, reference must be made to Hutton's paper (1947) on West Africa and Indonesia in which he tests the various theories of culture traits by reference to the burial custom of some Nigerian tribes and to that of the Nagas. He finds a large number of culturally close parallels between the two, absent in the intervening areas. He is inclined to explain the similarities by the activities of Indonesian sailors who may have doubled the Cape and sailed up north to the Bight of Penin. Hutton sums up the available evidence from physical anthropology and serology in support of his suggestion.

CHALCOLITHIC CULTURE

The publication of Mackay's report on the Chanhu-Daro Excavations, 1935-36 (1943) was one of the most important contributions in this field. The Chanhu-Daro mounds are situated in the Nawab Shah district of Sind, now 12 miles from the Indus. This was evidently an urban site 37 miles from the Kirthar mountains which are crossed by a pass and used by caravans to this day. There are three mounds which were carefully examined with regard to their stratification. The upper levels of one of them show pottery of the Zhukar and Jhangar types while the earliest strata show pottery of the Harappa culture. Mackay's studies not only extend to the area of the Indus Valley Civilisation described earlier in Sir John Marshall's monumental work, but its ramifications and developments also. Another important work was the excavation of the gate-way mound (AB) and the Cemetery R 37 at Harappa

(Wheeler, 1947). The western gates and terraces of Harappa showed some late rebuildings, consisting of poorly constructed structure associated with pottery of the Cemetery H industry. This cemetery showed two strata of which the earlier one revealed extended burials, sometimes with the knees of the skeletons slightly bent and orientated east and west. The pottery showed no affinity with the pottery of the Harappa culture proper. It is known that some of these burials were disturbed by later interments. The upper stratum showed fractional burials in urns, while the babies were found in the embryonic position. The decoration of the urns was unlike anything in the Harappa culture. At R 37 on the other hand the skeletons were normally extended with the head pointing north, excepting a solitary skeleton which pointed to the south. Here the pottery is of the usual Harappa type. The new pottery from Cemetery H has been presumed to indicate the arrival of a foreign population, possibly the Aryan invaders. While this is not improbable, the mere appearance of a different type of pottery whose anologues are unknown cannot be regarded as conclusive evidence of the Vedic Aryan invasion. During the decennium under review some very pertinent questions came to be discussed in connection with the background and chronology of the Indus Valley culture. These arose in connection with its relations with the prehistoric sites of Iran, Baluchistan and its expansion north, east and southward into the Indian mainland. Hisar, Gyan and Sialk are three important sites of Iran which by comparison with the sites of the Indus Valley and Baluchistan have yielded a chronological table showing the equation of the different strata in the different sites. On the Iranian site the synchronism was worked out by McCown (1942), while Starr, Gordon and Piggot worked it out for India (Starr 1941, Gordon 1947, and Piggot 1946). Between Iran and the Indus, extending far towards the east, the country is dotted with the remains of small settlements which have yielded painted potsherds, the designs and colouring of which have led to the synchronism. While city sites are few and far between, the majority of these settlements, notwithstanding the lack of knowledge resulting from excavations, have been attributed to the peasant community, so that the region of the chalcolithic painted-pottery cultures may be said to be conterminous with the millet and wheat areas. These were probably definite routes along which communication was maintained between the different extremities, and the potsherds enable us to determine the different zones and phases of culture within this area. Beneath the citadel wall of Harappa were found potsherds having affinities in northern Baluchistan from an early period. Pre-Harappan pottery is found at Amri and other sites in Sindh.

At Chanhu Daro the later cultures were non-Harappan. It has been proposed to recognise Aryan wares in some of the pottery, and comparison of copper tools and implements is brought up to support this view. Already in 1939 Ghirshaman spoke of a cultural thrust from the Caucasus to some of the North Iranian sites and he proposed to recognse this drift as that of the Indo-Europeans. Reference may be made to the papers of Gordon (1950) and Lal (1949) in this connection. Another important problem concerns the areas and the traits in respect of which the Indus Valley culture may be said to have survived. This also involves the problem as to what extent the hiatus between the closing stages of the Indus culture and the Proto-historic culture of India can be bridged by such survivals. Reference may be made among others to Gordon (1945), Peake (1944) and Gordon, Peake, Harald and Lal's study of the painted grey-ware of the Upper Gangetic Basin (1950), which tries to bridge the gap by showing how the grey-ware of Tilpat preceded the North Indian polished black-ware found in the early historical strata of many sites, though there was a subsequent overlap between the two. The grey-ware at Tilpat was in use as early as 6th-5th centuries B.C. The present writers are of the opinion that much has yet to be learnt about the distribution and succession of proto-historic pottery in India, by means of which lies the only chance of filling up the gaps in our knowledge, as systematic excavation in Northern India is likely to reveal the association of the copper, harpoons and celts with distinctive types of pottery. One of the outstanding handbooks on Indian Chalcolithic culture and in general on Indian prehistory is that of Stuart Piggott (1950). Piggott has an interesting chapter "Conquerors from the West—The Aryans and the Rigveda" with a drawing illustrating the Vedic chariot reconstructed from the Sulba Sutra (page 280). This may be compared with some tiny models taken from a historical site in the Jaipur State (Puri, 1938-40). Meanwhile, Wheeler's dramatic account (1950) of the sacking of the Indus Valley sites by the Vedic-Aryan does not appear convincing. The fact remains that we have not so far come upon any fire-altars characteristic of the Vedic-Aryan among the ruins of the Indus Civilization loci I. The fact that a Vedic altar for the horse sacrifice, probably dating from the second century A.D., was discovered at Kalsi in Upper India a few months ago, confirms the view that the Vedic-Aryans practised the fire ritual as mentioned in their early texts as a living element of their culture. It is not possible that they did not practise these (*cf.* Chhabra, 1947) cults, as this was exactly what gave them their superiority. Eventually we may have to differentiate between different waves of Aryan migration, one of which may be linked

with the evidence of the painted pottery and the bronze swords and shaft-hole axes, while the other may be associated with the fire cult which has survived up till now under all conceivable modifications in Hindu usage.

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Dr B. S. Guha

Readers will be sorry to learn of the tragic death of Dr B. S. Guha on the 20th October 1961 in a train accident in India. Dr Guha recently visited London where he saw Professor Ruggles Gates, and later he went to Edinburgh where the writer had the great pleasure of discussions with him. We were fortunate in that he left with us an article for publication in four parts, the first of which appears in this issue. Dr Guha's death will be a great loss to anthropology, particularly in India. He was a man who had a very well balanced ethnological sense, and who appreciated the fundamentals upon which ethnology had been developed over the years.

An obituary notice which Professor P. C. Biswas of Delhi University has sent us at our request is published below.—EDITOR.

DR BIRAJA SANKAR GUHA, Ph.D. (Harvard), F.N.I. died in a train accident on Friday, 20th October 1961, while returning from a meeting in Calcutta of the Central Advisory Board for Anthropology. Dr Guha was born of a distinguished family of Assam in 1894. After a brilliant academic career in Calcutta, where he took his M.A. degree, Dr Guha joined Bangabasi College as a lecturer in Philosophy. After completing his Ph.D. work under Professor Dixon at Harvard University he joined the newly opened Anthropology Department at Calcutta University.

In 1927 Dr Guha joined the Zoological Survey of India as Superintending Anthropologist and continued in that capacity until 1945. During his stay in the Zoological Survey of India he did monumental work on the ethnological studies of the Indian people in collaboration with Dr Hutton, the then Census Commissioner of the Government of India. To him goes the credit for building up the status of Anthropology in India. It is due to his work and efforts that the Anthropological

Survey of India was established in 1946. He was appointed its first Director and also Anthropological Adviser to the Government of India, two posts he continued to hold with distinction until his retirement in 1954.

Dr Guha continued his interest in research even after his retirement from the Anthropological Survey. He became Director of the Social Education Organizers' Training Centre, Ranchi for some time, and later Director of the Bihar Tribal Research Institute. He retired from this Institute after three years, but was still active and carrying out research under the Retired Scientists' Scheme of the Government of India. At the time of his death he was engaged in reconstructing the recently excavated skeletal finds of Maski. He was also working on data collected during the previous years, which he had hoped to publish in the near future.

Dr Guha was one of the senior Fellows of the National Institute of Sciences of India as well as a Fellow of the Asiatic Society of Bengal. In appreciation of his researches in Anthropology he was awarded the Annandale Medal by the Asiatic Society of Bengal. He presided over the Anthropology Section of the Indian Science Congress in 1928, and again in 1938 at the Silver Jubilee Session of the Congress. He was also a member of the Executive Council of the International Congress of Anthropological and Ethnological Sciences. Dr Guha represented India at various International Conferences on Anthropology and Psychology, and he was also a member of a number of International Commissions on standardisation of physical measurements.

Dr Guha was associated as an editor or member of the advisory boards of a number of Indian and foreign professional journals including *The Anthropologist*, *Homo* and THE MANKIND QUARTERLY. He also edited the *Bulletin of the Anthropological Survey of India*. He published a number of monographs and papers on Indian Anthropology. Dr Guha has not only done research but also trained a number of young Indians. In him we have lost a great scientist and a great teacher. His death has left a vacuum, not only in Indian Anthropology but also in the international field, which will not be easy to fill.

P. C. BISWAS

INCIDENTS OF FRICTION BETWEEN NEGROES AND WHITES IN SOUTH-EASTERN U.S.A.[1]

By JOHN B. WOLFE

Racial conflict has always been one of the nation's most pressing problems. In addition to causing a civil war, it has since 1619 forced successive generations of American Negroes and whites to struggle for peaceful coexistence. Some social scientists believe that the problem arises from marked differences in the cultural and social determinants of behavior of the two races. Thus, Davis, Gardner, and Gardner[2] state that Deep South Negroes must show compliance in dealing with the whites if they are to avoid trouble. And Hortence Powdermaker[3] suggests that the Negro must, in effect, behave as a masochist if he is to get along. It is further assumed that the difference in conditioning of Negro and white is possible largely because of the insecure position occupied by the Negro, that is, due to his "inferiority" reaction. In the humanistic, or perhaps humoristic mood, William Faulkner is quoted by the *New York Times*, March 8, 1958, as saying, "It's always been my belief that the white folks and colored folks simply don't like one another."

The purpose of the present inquiry was to shed light on the causes of strained racial relations by revealing specific incidents that actually occurred in the lives of individual Negroes in their contacts with whites, and *vice versa*. The specific instances of friction were revealed in quasi-depth interviews controlled by interviewers who used memorized questions with interviewees whose confidence had been gained. The main questions sought descriptions of situations that had arisen between the interviewee and a member of the opposite race. Detailed accounts of two incidents that were most unpleasant and two that were most pleasant were sought from each respondent. As control measures

[1] Financial support for this research was furnished by The Human Genetics Fund of New York City and was disbursed through The University of Mississippi, U.S.A.

[2] Davis, A., Gardner, B. B., and Gardner, Mary. *Deep South*: a social anthropological study of caste and class. Chicago, Ill. The University of Chicago Press, 1941.

[3] Powdermaker, Hortense. *After Freedom*: a cultural study in the Deep South. New York, The Viking Press, 1939.

for the interpretation of obtained differences, incidents of both displeasure and pleasure involving a member of the respondent's own race were also obtained. An open question terminated the interview. It was "What do you really think about the (*opposite*) race?"

The study, viewed practically, furnished a list of racial annoyances ranked in order of frequency of occurrence. The list, in the hands, or "minds," of culture carriers, could be a stimulus for easing race relations.

This report is only a general summary of part of the investigation, the details of which are to appear elsewhere.

A total of 1196 persons were interviewed. They were, in the main, native to the Deep South and were at home or at college at the time of the interviews. Of the total, 540 were Negroes; 656 were whites. The Negroes were 136 college men, 89 college women, 150 rural men, and 165 rural women. The word rural is used because nearly all subjects not in college were from either very small towns or the country. The college groups of Negroes were to a lesser extent from rural or semi-rural areas. The whites were 180 college men, 151 college women, 175 rural men, and 150 rural women. The white college population was less rural than its Negro counterpart. Concerning the subjects as a whole, they may be described as ordinary undistinguished people living in a region wherein agriculture is the modal occupation.

The interviewers were college trained adults. They worked under the supervision of a psychologist who had had experience as a wage-earning interviewer in government research. Each interviewer saw only members of his own race and sex. To discover the critical personal experiences involving Negro and white individuals, each interviewer followed a fixed procedure in selecting subjects and in questioning them in private. By way of establishing his identity as an authorized interviewer representing an institution of higher learning, he said, "I am a member of a group from ———— college (or University) that is trying to get some facts about personality and race problems. You are one of hundreds of people that I hope will help us by telling me just a few things. Your name will not be used in connection with what you say. In fact, no one will know that you tell me anything unless you tell it." Then the questions were asked as follows:

1. Some white people do things that we don't like. When you were made the maddest in your life by a white person, what had he done? What happened?
2. Now, can you tell me *another* time when you were made very mad by a white person? What had he done? What happened?

3. Which time were you *really* the maddest?
4. Some colored people do things that we don't like. When you were made the maddest in your life by a colored person, what had he done? What happened?
5. Next, can you tell me *another* time when you were made very mad by a colored person? What had he done? What happened?
6. Which time were you *really* the maddest?
7. When you were pleased the most in your life by a white person, what had happened?
8. Can you tell me *another* time when you were pleased by a white person?
9. Now, can you tell me when you were most pleased by a *colored* person? (*N.B.* Use "outside your family" only if necessary.)
10. Last, can you tell me *another* time when a colored person pleased you very much?
11. Now, I don't need your name, but I would like to get some background information.
12. What do you really think about (*the other race*)?

Recording of replies was done during the interview and hence preceded the collection of background data regarding education, economic status, rural or urban residence, age. Half the subjects were asked questions about their encounters with members of their own race first and then were asked about the other race. The other half of the subjects were asked first about the opposite race. This order was designed to balance possible effects of answers to first questions upon answers to subsequent questions.

The most difficult task connected with the study was that of refining the thousands of answers so that they could be comprehended as a whole. This was accomplished by the principal investigator and his chief assistant who assigned categories or class names to all incidents that were reported. With this done, it was possible to construct frequency tables which afforded comparisons of groups, sub-groups, sexes, and so on. Twenty-four tables were required for the refinement or translation of the raw data.

The manner in which classification was achieved was as follows. The reply to the first question by the first interviewee was read by the two investigators. A category name was recorded and a tally checked by it. (Verbs were almost always needed to describe the incidents because the questions were presented in such manner as to determine answers that were descriptions of actions, for example, "pelting," "swindling," "going my bail.") Then the

answer to the second question of the same form was read and, if appropriate, a tally was checked. If the reply was different, a new category was added and checked. Next were read the replies to the same questions by the second respondent and tallies or new categories were recorded, and so on for all the answers to all the questions by all the subjects.

Some of the categories were very specific, as was our original desire, while others were broad. One of the broad ones was labelled miscellaneous and was for those answers which produced disagreement between the investigators. Items in this category were, at a later session, jointly re-read and assigned to one of the existing categories or to a new one. Thirty-seven categories were required for the classification of the unpleasant incidents. Thirty-four were needed for the pleasant ones. The classification of answers of various sub-groups required only a portion of the entire list of categories; that is, some categories have a frequency of zero for some subgroups.

Replies to the open question on general attitude toward the opposite race were classified in the same manner as were the incidents data. There was one important difference in the outcome, however, as few verbs were applicable as names for the expressed attitudes.

The gross data from the two racial groups reveal that many more whites than Negroes were simply unable to recall any incidents when they had been made mad by a member of the other race. The difference was more than two to one and was to a considerable extent due to the white college women. Forty-three per cent. of them reported either no incidents or no opportunity for any.

A listing, for each racial sub-group, of the *four* most frequently occurring incidents of friction involving the same and the opposite race shows the main findings and allows both within and between-group comparisons to be made. The listing follows.

I. Rural Negro men vs. Negroes	%
1. Reneging on* debts or promises	14
2. Being a "white man's nigger"	7
3. Cursing or attacking a Negro	6
4. Being rowdy	4

same vs. whites	%
1. Censuring the respondent	17
2. Using contemptuous form of address	10
3. Cursing or attacking a Negro	8
4. Practical joking	4

* Dishonouring—Editor.

II. Rural white men vs. Negroes	%	same vs. whites	%
1. Reneging on debts or promises	11	1. Cursing or attacking a white	14
2. Working carelessly ...	10	2. Censuring the respondent	14
3. Driving carelessly ...	10	3. Reneging on debts or promises	13
4. Minor thieving (tie)	8	4. Commanding arbitrarily ...	9
5. Cursing or attacking a white (tie) ...	8		

III. Rural Negro women vs. Negroes ...	%	same vs. whites	%
1. Censuring the respondent	32	1. Censuring the respondent ...	25
2. Cursing or attacking a Negro	13	2. Using a contemptuous form of address	11
3. Reneging on debts or promises	6	3. Accosting a Negro woman	6
4. Commanding arbitrarily	5	4. Pelting	5

IV. Rural white women vs. Negroes ...	%	same vs. whites	%
1. Minor thieving ...	17	1. Censuring respondent ...	20
2. Working carelessly ...	16	2. Reneging on debts or promises	9
3. Reneging on debts or promises	13	3. Driving carelessly ...	7
4. Driving carelessly (tie)	6	4. Minor thieving (tie) ...	5
4. Grumbling (tie) ...	6	4. Commanding arbitrarily ...	5

V. College Negro men vs. Negroes ...	%	same vs. whites	%
1. Censuring the respondent	24	1. Censuring the respondent	24
2. Being a "white man's nigger"	11	2. Using contemptuous form of address	19
2. Being rowdy (tie) ...	11	3. Cursing or attacking a Negro	14
4. Cursing or attacking a Negro	9	4. Instructing in how to be a "white man's nigger" ...	4
		4. Refusing service (tie) ...	4

VI. College white men vs. Negroes	%	same vs. whites	%
1. Acting as a social equal	10	1. Censuring the respondent ...	17
2. Working carelessly ...	10	2. Cursing or attacking a white	14
3. Grumbling	9	3. Commanding arbitrarily ...	12
4. Cursing or attacking a white	8	4. Interfering with dating ...	8

VII. College Negro women vs. Negroes ...	%
1. Censuring the respondent	15
2. Cursing or attacking a Negro	10
3. Commanding arbitrarily	8
4. Lying	7

same vs. whites	%
1. Using a contemptuous form of address	14
2. Censuring the respondent ...	13
3. Serving a late-comer out of turn	9
4. Cursing or attacking a Negro	8

VIII. College white women vs. Negroes ...	%
1. Accosting a white woman	10
2. Working carelessly ...	6
3. Minor thieving ...	6
4. Grumbling	5
4 Driving carelessly (tie)	5

same vs. whites	%
1. Censuring the respondent	15
2. Commanding arbitrarily ...	9
3. Reneging on debt or promise	8
4. Cursing or attacking a Negro	4

The relationship of attitude, as determined from the open question, to incidents involving the opposite race was negligible. The number of people in each sub-group and those who had attitudes unrelated to their incidents were respectively as follows.

Rural Negro men 149-126; Rural white men 171-167.
Rural Negro women 138-108; Rural white women 147-138.
College Negro men 124-82; College white men 175-157.
College Negro women 87-64; College white women 151-151

BIOGRAPHICAL NOTE

John B. Wolfe. Born in Dryden, Virginia, July 8, 1904, and educated in the public schools of that town. B.A., Emory and Henry College, 1925; M.A., University of Virginia, 1928; Ph.D., University of Illinois, 1932. Fellow of the National Research Council, 1932-34, working under the direction of Dr Robert M. Yerkes in the Department of Psychobiology at Yale University. Fellow of the General Education Board, 1934-36, under the direction of Dr Mark A. May in the Institute of Human Relations at Yale. Professor of Psychology and Chairman of the Department at the University of Mississippi since 1936. Fellow of the American Psychological Association, a member of the Southeastern Psychological Association (its President in 1955), and a member of the Southern Society for Philosophy and Psychology (its President in 1952). Research Articles in the Journal of Psychology, the Journal of Comparative Psychology, Comparative Psychology Monographs, Child Development Monographs, The Journal of Nervous and Mental Diseases.

A RESEARCH PROPOSAL FOR UNESCO

By DAVID C. RIFE

The United Nations Educational Scientific and Cultural Organization is regarded by people throughout the world as an authoritative source for the integration and interpretation of scientific data in relation to human welfare. However, many competent anthropologists, psychologists and geneticists emphatically disagree with portions of Statements on Race by UNESCO,[1] especially those which imply that there are no innate differences between ethnic groups in mental capacity and behavior, while others feel that data on hand are as yet insufficient to reach a final conclusion.

Conventional tests of IQ and other abilities lack complete validity, and test scores are subject to different interpretations, which are frequently colored by emotional or other types of bias. This is especially true of comparisons between ethnic or racial groups. Many people consider it undemocratic to admit the possibility of group differences in intelligence and ability, forgetting that differences need not necessarily imply superiority or inferiority. Passions aroused on the part of advocates of extreme viewpoints remind one of the heated debates on organic evolution a generation ago.

Many who believe that the evidence indicates that ethnic groups differ in regard to intelligence and ability assume the attitude that it is unfortunate that they cannot accept the egalitarian point of view. I cannot accept the latter philosophy. Genetic variability is essential for survival and evolutionary progress, and enriches mankind.

Regardless of our philosophic leanings, however, as scientists we are obligated to search for and present the facts, whatever they may be. As the official international organization which serves as a responsible source for scientific information, it would appear most appropriate for UNESCO to sponsor research on a controversial subject of fundamental importance to the welfare of mankind. The object of this paper is to outline a new method for

[1] *What is Race?* UNESCO, 1952, Appendices II and III.

tackling the problem of hereditary differences in man, which avoids the usual pitfalls in the interpretation of behavioral variations.

The new technique consists of a comprehensive survey of relatively new populations of mixed origin. The objective of the survey would be to test for statistically significant associations between physical variations with high heritabilities and variations in other traits whose possible heritabilities were hitherto unknown. If the traits showing the association are of no importance from the standpoint of selective mating or survival value, and if no associations are found between these traits and other heritable traits, the association is indicative of linkage. This in turn presents very strong evidence that both of the associated traits are inherited. It would be difficult, indeed, to explain this type of association on cultural or environmental grounds.

The foregoing type of association between traits, if due to genetic linkage, would be evident only in relatively new hybrid populations derived from parent stocks differing greatly from each other with respect to frequencies of the traits manifesting the association. Thus discovery of these associations not only gives very strong evidence for a hereditary basis for the hitherto unknown, but also demonstrates that ethnic groups differ from each other in regard to the incidence of both variables.

Genes located on different chromosomes attain genetic equilibrium within one generation of random mating. But more than one generation of random mating is required for linked genes to approach equilibrium, the number depending upon how closely the genes are linked. Old established populations are in equilibrium, with respect to all genes, whether independent or linked. Thus new hybrid populations are essential for the employment of the foregoing technique.

I propose that UNESCO should sponsor a comprehensive investigation of one or more relatively new populations of mixed origin. The survey team should include, as a minimum, an anthropologist, a psychologist, a serologist, a physiologist, a physician, a geneticist, a biochemist, and a biometrician. University or secondary school students would provide excellent subjects for study. Anthropometric, sereological, biochemical, psychometric, physiological, pathological and other appropriate data could be collected and coded. These would be turned over to the biometrician. He would then analyze the data for significant associations between any of the variables under consideration.

Discovery of a highly significant association between a known heritable physical variation and a behavioral variation, and the absence of such an association with any other known heritable

trait, would be indicative of linkage, which could then be accepted as positive evidence for inheritance of the behavioral variation.

The author has employed the foregoing technique on a very modest scale in two investigations, the first on northern Sudanese[2] (a mixture of Arabs and Nilotic Negroes), and the second on Cape Colored people in South Africa.[3] I shall briefly review the second investigation.

The Cape Colored are essentially a mixture of Hottentots, South African Bushmen, and Malayans. This mixing has been under way for over two centuries, and there are now estimated to be a quarter of a million Cape Colored in Cape Town. They live under unusually uniform cultural conditions, and attend their own schools and churches. Various types of data were collected from 135 Cape Colored. One psychometric variation was included among the battery of tests, the ability to distinguish the correct order from light to heavy among small boxes alike in appearance, but varying in weight, from 5 to 8 grams.

Analysis of the data revealed a highly significant association between ability to discriminate the weights, and ridge counts on finger tips. Ridge counts on finger tips have a heritability of 90%.

The following table summarises the results:

WEIGHT DISCRIMINATION		AVERAGE NUMBER RIDGES PER PERSON
Number persons correct	64	$159{\cdot}09 \pm 6{\cdot}08$
Number persons incorrect	52	$131{\cdot}34 \pm 9{\cdot}12$
Difference		$27{\cdot}75 \pm 10.956$

The odds are approximately 99 to 1 against the difference in ridge counts being due solely to chance. Similar tests, plus ABO blood groups and anthropometric data were collected from Goans in Kampala, and prisoners at Zanzibar, but no significant associations were found between any of the traits under consideration.

The results are in accord with those expected if skill in discrimination between small weights has a hereditary basis, the genes for which are located on the same chromosomes as those responsible for variations in number of ridges on finger tips. This in turn indicates that the parent populations of the Cape Colored differed significantly from each other in regard to both traits.

This type of investigation should be done on a much more comprehensive scale than it is ordinarily possible to achieve by small teams of investigators. It would likely cost at least half a million dollars to conduct it properly.

[2] *American Journal of Human Genetics*, March, 1954, pp. 26-33.

[3] *Eugenics Quarterly*, December, 1956, pp. 213-8.

While it is true that one cannot predict with certainty that this type of research would definitely settle any particular phase of the genesis of human behavior problem, it would yield other types of data of considerable importance. It could conceivably tell us more about such important problems as possible genetic differences in minimal nutrition requirements, susceptibility to disease, climatic adaptability, size, and a host of others.

UNESCO would appear to be an ideal organization to sponsor this type of research. It would be in a position to select a team with representatives from various nations, thus eliminating the possible suspicion that the project was undertaken to try to prove the superiority of one ethnic group over another. Furthermore, it would be allied to other research problems they are sponsoring, such as human ecology and climatic adaptability. Finally, it would demonstrate to the peoples of the world its earnest desire to seek the truth, and not to depend upon mere opinion.

BIOGRAPHICAL NOTE

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NOBEL AWARDS, NATIONALITY AND EDUCATION

By IVER N. MADSEN

The recent awarding of the Nobel Prize for Literature to Boris Pasternak, a Soviet writer, and to three Soviet physicists, reminds us that only twice before has this prize been awarded to Russians. The first of these was made in 1904 to I. P. Pavlov in the field of physiology for his discovery of the conditioned reflex which has become increasingly important in the psychology of learning, in propaganda, and in brain washing; the second was made in 1956 to Professor Nikolai Semenov in chemistry. These six distinguished Russians received their education in pre-Soviet schools under the Tsar, or in the disorganized schools between World Wars I and II. By way of comparison, we shall also note the number and kinds of awards made to nationals of 25 other countries with award winners during the last 58 years (1901-1958).

Before such comparisons are made, it may be well to review briefly the origin and nature of the Nobel prize. The founder was Alfred B. Nobel, the inventor of dynamite, who bequeathed $9,000,000, the interest of which was to be distributed annually to those who had contributed most to the benefit of mankind during the preceding year in the five fields of physics, chemistry, medicine and physiology, literature, and peace. It was stipulated by the founder that "no consideration whatever shall be paid to the nationality of the candidate, the most deserving to be awarded the prize."

The first awards were made in 1901 to six winners—two German, two French, one Swiss, and one Dutch. The most famous or best remembered of this group is probably W. C. Roentgen of Germany for his discovery of X-rays. Since its foundation the award has been made to a total of 298 winners including those of 1958. The largest number, 69, was in physics and the smallest, 48, for peace. The reasons for this difference are that awards have not been made every year in all categories and that in some years they were divided between two or more winners.

In the comparisons that follow, the nationality of a winner is determined by his status at the time of the award. Thus Einstein, who received it in physics in 1921, is counted as German and not as American which he became at a later date. Many countries

have had winners born in some other country but this exchange of talent cancels out so that no one country can be accused of benefitting unduly through natives of other countries.

In total number of awards, the "Big Four" are: the United States, Germany, Britain and France in that order, with 67, 52, 43 and 31 respectively. In physics, Americans have 16 awards, the British 15, and the Germans 12; in chemistry the Germans lead with 21 awards to 11 and 10 respectively for the Americans and British; in medicine and physiology, Americans with 22 awards outnumber the Germans with 11 and the British with 7; in literature, the French top the list with 10 awards as compared with 6 for Americans and 5 each for German and British winners; Americans again head the list in number of peace awards with 12 as compared with 8 for the French and 6 for the British.

It thus appears that Americans top the lists in physics, medicine and physiology, and in peace awards. They also have second place in chemistry and literature. However, it is only fair to note that the American population is about four times that of either Britain or France and that it is more than twice that of Germany. The latter country, nevertheless, with 21 awards in chemistry has twice as many as the United States. This pre-eminence of Germany in chemistry seems consistent with her leadership in the application of this science during the last half century or more.

By geographical areas, a total of 211 award winners were nationals of northern and western Europe and only eight of eastern Europe—two of Poland and six of Russia. North America, including the United States and Canada, received 71 awards and South America only three—one to Chile and two to Argentina. Asia with half the world's population received five awards—one to Japan, two to China, and two to India. No awards went to Africa although Dr Max Theiller, born in the Union of South Africa and educated chiefly in Britain, received an award in medicine and physiology as an American. In other words, of the 298 awards, all but 16 went to West European or North American nationals; that is, these two areas with less than a fourth of the world's population produced 95 per cent of all Nobel award winners, while the rest of the world consisting of eastern Europe, Asia, Africa, and South and Central America produced only five per cent.

Whether this lopsided difference is due to an inherent difference in the peoples involved, a difference in education, or a combination of both is indeed an interesting question. If all races and nationalities are inherently equal in brain power, can education bring out this potential talent? Is it a function of aid to underdeveloped countries to implement and support such education? Many of them are said to have an abundance of resources awaiting

technical know-how for exploitation. On the other hand, if the potential talent is not there, an increased food supply by means of huge dams and modern agriculture could result in further "population explosion"—about which we are beginning to hear—and more underdevelopment when outside aid has run its course and local talent is not up to managing the developments provided by American and other outside aid.

The "Big Four" countries referred to above have a combined population of 322 million people or about 11 per cent of the world total. Since these countries have a combined total of 193 winners, this means that 11 per cent of the world's population has won 65 per cent of Nobel awards.

While the "Big Four" have the lion's share of awards, a number of smaller countries on a population basis have done even better. In making these comparisons, population reports from official sources of 1956 or earlier have been used. With these data, the number of award winners per million population can be computed. On this basis, Iceland witih a population of 160,000 and one award winner, ranks first with the equivalent of 6.25 per million. In second place is Switzerland with 2.60; Denmark is third with 2.25; Sweden is fourth with 2.14; Norway is fifth with 1.67; and Austria is sixth with 1.30.

By way of contrast, China with 602 miillion people and two awards has a rank of .003 or one award with 301 million people; India with 382 million and two awards has a rank of .004 or one per 191 million; Russia with 200 million people and six awards ranks .03 or one per 67 million. To equal Iceland in awards, Russia should have 1250 winners! Of course, such statistical computations based on Iceland's one award may seem to be far fetched since, as the proverb has it: "One swallow does not make a summer." A more convincing statistical comparison can be made between the United States and Russia with more nearly the same population. If Russia had a rank of .40 as the United does, she should have 80 awards instead of six!

What reason can be assigned for these wide differences in productive genius of different nationalities and races? Are they due to inherent racial superiority of northern and western European stock? Or are they due to superior education in developing latent talent? The first theory is usually assumed, in America at least, to have been demolished as a by-product of the war, at least so far as Hitler's version of it is concerned. This leaves us to explore education as a factor.

Fundamentally, education in the West consisting of the countries listed above in Europe and North America has been the same, namely literacy for the whole population and more advanced and

specialized education for those able to benefit by it. To be sure, there were differences in ability to support such education and differences in the content and method of teaching. Such differences, however, have not prevented genius from emerging in any of them.

Basically, Russian education followed the same pattern with the exception that elementary education for the masses was far from universal till the communists took over. On the higher levels, education was limited to an élite few. About the same has been true of South and Central America.

It has often been pointed out that in the United States the ideal, theoretically, has been that of universal education from the primary grades to the university with the assumption that it would ultimately be possible for every child to acquire the same education as every other child and that democracy requires that the same goals are possible for all. In actual application, however, our system has resulted in the elimination of the poorer learners at various levels on the road to university education. In spite of a belief in the equal ability of all students to master high school and college education, we have permitted the changing or simplyfying of the curriculum to allow more and more slow learners to go to high school and college. This, in turn, has resulted in "lowering standards" and in our present dissatisfaction with the quality of education at all levels.

European countries have traditionally held to a differentiated education after the primary grades so that college-bound pupils would begin their high school preparation for college two or three years earlier, be exposed to a more rigorous curriculum, and graduate two or three years sooner. Before the advent of "progressive education," we achieved somewhat the same results by eliminating from school the slow or reluctant learners at various levels.

Much has been said following the Sputnik excitement about the efficiency of Russian education as now practiced in that country, and most of it is quite uninformed. In the first place, whatever the Russian schools are doing they could hardly have begun before the end of World War II, in 1945, just thirteen years ago. Certainly the war would preclude much concern with public education during its course. Before the war, Russia's educational system was still in a primitive stage of development. After the revolution, believe it or not, Russia experimented with the American idea of "progressive education" on the theory that it would be the perfect system for a revolutionary society. This was abandoned in 1934 after being in effect since 1918, a period of sixteen years. At its peak in Russia, educational standards sank so low that the system was abolished and replaced with the more

rigorous standards of France, Germany, and Britain which were similar to those of the better American schools of pre-progressive days.[1] This is the system which sets up standards which pupils must master or drop out into trade schools or into jobs—in other words, this system did not alter standards to suit the abilities or inclinations of the pupils.

In view of the foregoing, it would strain credulity to believe that during the four or five years of the present Russian educational system before the war and the thirteen years after 1945, it would be possible to train thousands of scientists, linguists, and technicians. A Russian child beginning his education in 1945 at the age of six would now (1958) be nineteen and, given the necessary aptitude, in the early years of college. Most of them, of course, entered later and would be correspondingly younger. These youngsters could hardly have completed a professional course, much less have achieved distinction in a profession.

It follows that whatever technical progress Russia has made since the war has been achieved by the relatively few scientists and technicians trained before the present educational system had begun to operate. Added to this, of course, is the extensive help given by the U.S. in money, engineers and technicians during and after the war and the not so voluntary help obtained by Russian espionage. Of even more help to the Russians have been the thousands of German scientists captured by Russia and taken there after the war, plus the stripping of German factories to be reassembled there. It is probable that these German scientists have a major part in developing the Russian stock of nuclear weapons, heavy industry, and engineering. According to an article in *Reader's Digest*,[2] the Russians set up in Germany a production network manned by some 5500 scientists, production men, draftsmen and mechanics for the purpose of catching up in liquid-fuel rockets. In the fall of 1946, some 5000 scientists, technicians, and experts in weapons, aircraft or industry were rounded up with their families and belongings and "sent into a de luxe servitude from which some may not even yet have been released." It was estimated that twenty to twenty-five thousand people were thus deported in one night.

Other major non-western countries, particularly in Asia and Africa, with the exception of Japan, have barely begun the application of science to lifting living standards of the masses. Japan, which for several generations has had an educational system com-

[1] See A. Whitney Griswold, President of Yale University, for confirmation of this statement, *Ladies Home Journal*, p. 144, May 1958.

[2] *Reader's Digest*, August 1958, pp. 97-101.

parable to that of the western countries, is leading in Nobel awards but is nevertheless far behind the West in receiving such awards. Her remarkable progress has been imitative rather than pioneering in these fields and may be the result of a relatively high

TABLE I

Nobel Prize Winners 1901-1958 *inclusive compiled from World Almanac.*

NATIONALS	(1) Physics	(2) Chemistry	(3) Medicine Physiol.	(4) Literature	(5) Peace	(6) Total Awards	(7) Present Populations	(8) Ratio Awards to Populations
American	16	11	22	6	12	67	164	.40
Argentine			1		1	2	19	.11
Austrian	3	1	3		2	9	7	1.30
Belgian			2	1	3	6	9	.67
Canadian		1	2		1	4	17	.24
Chilean				1		1	7	.14
Chinese	2					2	602	.003
Danish	1		4	3	1	9	4	2.25
Dutch	5	1	1		1	8	11	.73
British	15	10	7	5	6	43	42	1.00
Finnish		1		1		2	4	.50
French	4	6	3	10	8	31	44	.70
German	12	21	11	5	3	52	72	.72
Hungarian		1	1			2	10	.20
Icelandic				1		1	.16	6.25
Irish	1			1		2	3	.67
Italian	2		1	3	1	7	48	.15
Japanese	1					1	90	.01
Norwegian				3	2	5	3	1.67
Polish				2		2	28	.07
Portuguese			2			2	9	.22
Russian	3	1	1	1		6	200	.03
Spanish			1	3		4	29	.14
Swedish	3	4	2	4	3	16	7	2.14
Swiss	1	3	3	2	4	13	5	2.60
Totals	69	61	67	53	48	298	1816.16	

NOTES.—The population column totals nearly one billion less than the present world population. In other words, nearly one billion did not contribute any prize winners at all. Column (8) shows ratio of winners per million population.

1. Since Nobel awards are spread over a period of 58 years, the total population contributing winners is greater than the total present population.
2. By geographical areas, the ranks based on number of winners are: (1) North-west Europe; (2) North America (U.S.A. and Canada); (3) South and South-west Europe; (4) South America; (5) Russia and Balkans; (6) Asia; (7) Africa made no contribution to award winners.

average intelligence of her people plus a good universal educational system.

Can education alone elevate the backward peoples of the world? Does it not also require a high average native intelligence of the masses and, above that, does a dynamic society need a generous supply of potential genius at the top of the distribution? A hundred years ago Sir Francis Galton, a British scientist, wrote his *Hereditary Genius* which clearly implies that native genius is a potent factor in human progress. Certainly there are many human traits that facilitate progress in human affairs and surely native intelligence is a *sine qua non* among them.

It must be obvious that education in itself does not guarantee top performance. Every profession has far more ordinary workers than it has of those who rate superior and infinitely more than it has of the brilliant. In spite of lengthy college and professional training, they may range from ordinary plodders to down-right incompetents. It may well be that many of these, who are low on the totem pole of their profession, would have been happier and more useful to themselves and society in less ambitious vocations. The fact is that only a small percentage of young people can be educated in science or the learned professions and these not equally well. While opportunity to explore and try should be available to all, we should beware of the false concept of democracy that equality of opportunity means identity of education. We should be content with schools geared to discover the aptitude of each individual and to develop it to its maximum.

TABLE II

This Table, compiled from Table I, *shows the Rank of each Country in Nobel Awards based on Population.*

COUNTRY	RANK	COUNTRY	RANK
Iceland	6.25	Canada	.24
Switzerland	2.60	Portugal	.22
Denmark	2.25	Hungary	.20
Sweden	2.14	Italy	.15
Norway	1.67	Spain	.14
Austria	1.30	Chile	.14
Britain	1.00	Argentina	.11
Holland	.73	Poland	.07
Germany	.72	Russia	.03
France	.70	Japan	.01
Belgium	.67	India	.004
Ireland	.67	China	.003
Finland	.50	Africa	.000
United States	.40		

The ranks are obtained by dividing the number of awards of a country by its population in millions.

Book Reviews

DARWINISM AND THE STUDY OF SOCIETY: A CENTENARY SYMPOSIUM

Edited by Michael Banton with an introduction by J. Bronowski. Tavistock, London, 1961. Pp. 191.

As is almost always the case in collections of this type the contributions vary in merit. The essays by Basil Willey (*Darwin's Place in the History of Thought*, pp. 1-16) and George Shepperson (*The Intellectual Background of Charles Darwin's Student Years at Edinburgh*, pp. 17-35) are informative, temperate and well documented considerations of Darwin's place in intellectual history.

The same cannot be said of all the subsequent essays. A curious feature of the essays is that while urbane, one might say almost sympathetic, treatment is accorded the speculations of Karl Marx (*vide* particularly, J. Maynard Smith, *Evolution and History*, pp. 89 f.) even to the extent of trying to treat in an intelligent and intelligible manner the vague and imprecise notion of "dialectics" in nature to which Marxists are addicted (*cf.* pp. 92 f.; compare for contrast Dworkin's treatment "Dialectics: A Philosophical Analysis," *Studies on the Left*, I, No. 4, 1961, pp. 52-62) the work of "Social Darwinists" is dismissed in an almost irresponsible manner. W. Stark (*Natural and Social Selection*, pp. 49-61) treats the sociological concepts of Ludwig Gumplowicz (whom he insists on referring to as "Ludwik" Gumplowicz, *cf.* pp. 57, 59) in so uninformed a fashion that one wonders if he has read his subject's work with any application at all. Stark conceives Gumplowicz as "retreating" from a "naturalist" position because Gumplowicz employed the concepts "ethnic group" and "race" interchangeably. But Gumplowicz was careful to indicate a consistent rationale for such use (*cf. Rassenkampf*, Innsbruck, 1883, pp. 193 f.). Gumplowicz was dissatisfied with the terminology applied in his time (*cf. Outlines of Sociology*, Philadelphia, 1899, p. 48) and suggested his use as alternative. Stark has a legitimate right to object to such an alternative but he has no right to suggest that Gumplowicz was employing the terms in any other sense than that explicitly stipulated by Gumplowicz (*cf.* Salomon's introduction to Gumplowicz, *Geschichte der Staatstheorien*, Innsbruck, 1926, pp. v-xxxv). Gumplowicz' use was consistent and his conception essentially "biological," or "naturalistic." Only by introducing definitions of "ethnic group" and "race" that Gumplowicz would not have admitted can Stark find a "contradiction" in the articulation of Gumplowicz' basic position.

M. Banton (*The Autonomy of Post-Darwinian Sociology*, pp. 167-179) gratuitously introduces a discussion of Sir Arthur Keith's theories of human evolution. Keith, it will be remembered, suggested that the disposition to preferred association, evident among men, was somehow "imbued by nature." Banton objects that "racial antagonism" is not an "inherited trait." This seems to be an unnecessarily narrow interpretation of Keith's position. While no one would contend that language is "inherited," few would deny that the capacity to learn a language is genetically determined, i.e. is "innate" (*cf.* S. A. Barnett, *Communication in Animal and Human Societies*, p. 150). When Waddington informs us that animal populations

exhibit marked mating preferences, "usually favouring mates of their own race" (*The Human Evolutionary System*, p. 67), it is difficult to avoid conceiving this as presumptive evidence of an innate dispositional trait in much the same fashion as Keith suggests. That the intensity of the preference or repugnance is influenced or redirected by the particular individual personality structure, by prevailing social relations, by competition, does not in the slightest detract from the consideration of the preference for one's kind (however defined) as a generic social fact, "imbued by nature," any more than the influence exercised by the peculiar locale and circumstance on the choice and development of language argues against the generic capacity to speak on the part of human beings.

Waddington seems much closer to the truth when he contends that the dynamics governing the barriers to cross-mating suggest novel and potentially fruitful avenues of investigation to the sociologist (pp. 80 f.). Banton seems to overlook, or underestimate the importance of, these suggestions (p. 178). Morris Ginsberg (*Social Evolution*, pp. 95-127) is far more judicious, indicating that the relationship between biology and sociology has not been sufficiently explored and that, while it seems safe to conclude that the influence of racial composition on the character and institution of nations has not been a leading factor in social evolution, we labor in this area with a paucity of tools (p. 106; *cf.* also Hogben, *Darwinism and Human Society in Retrospect*, p. 47).

Some of the postures assumed by the essayists seem exaggerated. Hogben equates physical anthropology with phrenology as a "blind alley in the landscape of biological science" (p. 48). Farrington suggests that there is "no phylogenetic connection between animal cries and human speech" because animal cries are "without conscious communicative intent" (*Social Mind and Animal Brain*, p. 135). Now unless Farrington can enter into some kind of mystic empathy with animals, it is difficult to imagine how he could certify such a proposition.

The essay by S. A. Barnett (*Communication in Animal and Human Societies*, pp. 139-152) seems particularly suggestive in its stress upon the relationship between biology and sociology, ethnology (the study of animal behavior) and human behavior. The work by Waddington reflects his usual high degree of competence.

Some typographical errors mar the test (*cf.* pp. 3, 58, 70, 129) but the format is otherwise attractive. The text is supplemented by biographical notes on the contributors and a substantial index.

A. James Gregor.

THE ETRUSCANS

By Raymond Bloch. Thames and Hudson, London, 1958. Pp. 260, 79 plates, 41 line drawings. Price 25s.

This is a first class up-to-date account in small compass of the Etruscans, and yet it is full of facts which gave a clear picture of this ancient, and still mysterious, people. The main interest to anthropologists lies in the origins claimed for them. The author summarises the evidence for the several theories. The principal of these is that the Etruscans formed an enclave of pre-Aryan culture in Italy, and another is that they were migrants from Lydia, in Asia Minor, as believed by the ancients. The author gives reasons for rejecting the former theory, and on the whole adheres to the latter. The study of certain names in common between Etruria and Lydia, certain aspects of religion, and particularly of divina-

tion, and the character of Etruscan art, all point to an Asiatic homeland, at least for the aristocracy of the Etruscans, who must, accordiing to this theory, have carved out for themselves a state in central Italy by subduing the previous inhabitants, over whom they ruled, and upon whom they eventually imposed their culture and language. The enormous difficulties of deciphering the language are discussed, as are those words which crept into it from the surrounding Aryan peoples of Italy, and those which these borrowed from the Etruscans. Because it has not been possible to decipher and understand Etruscan (except for certain words which appear on the short tomb inscriptions, from which it is possible to read the names of the dead, and their ages), its linguistic group is not known—except that it is certainly not an Aryan language. A reference is made to Professor Sergi's failure to find any difference between the skulls of the Etruscans and those of the rest of the Italians. This, however, is by no means conclusive, as first of all it is clear that all the people of Etruria were not strictly Etruscans at all—although they were culturally and linguistically *Etruscanised.*

What is quite significant, to our mind, is the anthroposcopical evidence, as portrayed by the Etruscans themselves. Although a large proportion of the portraits show people with regular Nordic or Nordo-Mediterranean features (it is not possible to distinguish these except for colouring) there are others which clearly show evidence of Armenoid strain. This would indicate an Armenoid origin—and that means a derivation from Anatolia. Therefore the Etruscans are to be looked upon as some species of the *Maritime Armenoids* of Elliot Smith. The fact that this type is still found in the Italian population, which means that the Etruscan cannot be said to stand out apart from the Italian, is not surprising, as no one has argued that the Etruscans were exterminated. But the fact that the acquiline, and Armenoid, type of nose, for instance, which is a very striking Armenoid feature, does occur in Italy, where one would rather expect only Nordic, Mediterranean, and in the north Alpine and Dinaric, features, goes a long way to confirm that the ancient traditions of the migration of a part of the Lydian people from Asia to Italy were not just sheer phantasy, but rather were based upon a general fact.

A CLINICAL AND GENETICO-STATISTICAL STUDY OF SCHIZOPHRENIA AND LOW-GRADE MENTAL DEFICIENCY IN A LARGE SWEDISH RURAL POPULATION

By Bertil Hallgren and Torsten Sjögren. Munksgaard, Copenhagen, 1959. Pp. 65.

This monograph gives compelling evidence of a degree of experimental diligence and scientific competence that can only be envied. The study is conducted with respect to deficits having an undisputed genetic component. The morbidity rate for schizophrenia is significantly higher among children in families where one or both parents suffer from the disease than among those where both are non-schizophrenic (pp. 15, 60). The concordance rate for schizophrenia among monozygotic (one egg) twins is approximately 80 per cent (i.e., where one twin is afflicted the other is also so afflicted in 8 out of 10 cases), while concordance among dizygotic (two egg) pairs is approximately 15 per cent (p. 16). Similarly, most authors agree that genetic factors are also of significance in the occurrence of low-grade mental deficiency (p. 7) although insufficient knowledge concerning the aetiology involved obscures their identification

as genetic entities (*cf.* p. 43). Nonetheless twin studies indicate a high concordance rate—in some cases as high as 90 per cent.

The monograph delivers material illustrating a significant association between schizophrenia and mental deficiency, something which had not been statistically established previously. The morbidity rate for mental deficiency among schizophrenics is approximately 10 per cent as against the risk of 3 per cent estimated in the general population (p. 59). The data presented confirms the findings of previous investigators concerning the importance of hereditary factors in manifestation of schizophrenia and low-grade mental deficiency (the morbidity rate for schizophrenia among sibs is estimated at approximately 7 per cent as against the 1.6 per cent risk in the general rural population; the morbidity rate for low-grade mental deficiency among sibs is approximately 8 per cent as compared with the corresponding risk of ·9 per cent in the general population, *cf.* pp. 58-62).

The authors are competent in their analysis and careful in their statistical treatment of their data, classification and distribution being undertaken in accordance with well-formulated and precisely defined concepts. References to professional literature are informative and serve to afford insight into the preparation brought to this study.

A. James Gregor.

THE BLACK MUSLIMS IN AMERICA

By C. Eric Lincoln. Beacon Press, Boston, 1961. Pp. 276. Price $4.95.

Although America's Black Muslims have, of late, been the subject of considerable attention, this volume is the first fully documented work devoted entirely to them. It affords the sociologist, as well as the lay reader, a generally competent and objective insight into this most recent complication in the already complex puzzle of American race relations.

The Black Muslims constitute a Negro protest group possessed of most singular attributes, attributes which should be, and are (at least in part), in this work, carefully analysed. For the movement has a vitality and growth unmatched in the history of Negro protest—unmatched with the exception of the Garvey Movement of the early and mid-twenties (*cf.* pp. 22 f.). "It has a vitality unmatched by any other organized movement with a large Negro membership" (p. 84). That this is a recognized fact is of considerable importance when one considers the demands tendered by "The Nation of Islam in the West."

Their foremost and most insistent demand is for *separation* (pp. 72, 74). "The Black Muslims demand absolute separation of the black and white races" (p. 87). In this they echo the demands made by Marcus Garvey over a generation ago (*cf.* E. D. Cronon, *Black Moses*, Madison, University of Wisconsin Press, 1955). In advancing this demand Garvey, like the Black Muslims, mustered the Negro masses to his standard, something Negro "integrationist" organizations have never been able to accomplish. That such a sentiment can animate a substantial body of Negro opinion in the United States is extremely significant.

The Negro demand seems to be, substantially, based on the notion that a positive Negro identity can only be forthcoming in an environment which systematically instills Negro biological and cultural values (pp. 32, 124). A white society fosters white value preferences (i.e., certain physical, hereditary attributes are accepted as preferred with an *a priori* conviction

of the most perfect sort, around which, invariably, collect ascriptions of moral and spiritual worth: *cf.* M. Goodman, *Race Awareness in Young Children*, Cambridge, Addison Wesley, 1952. Pp. 28 f., 35, 37, 39, 42 f., 46, 48 f., 54, 59 ff., 66 f.). A Negro "integrated" into that society can only find his identity within its compass by losing himself in it, i.e., by being biologically assimilated (pp. 46 f.). This offers no immediate solution to the average Negro's problem and his day to day awareness of what C. D. Darlington calls the "repugnance to outbreeding" ("The Control of Evolution in Man," *Eugenics Review*, L, 3, October, 1958, p. 172) leads him to understand that significant "integration" in this literal sense is, for all intents and purposes, impossible (p. 89).

What the Negro members of a mass protest movement (the Garveyites and the Muslims specifically) explicitly seek is not association with whites (although they adamantly oppose *legal* proscriptions against such association because of the implied inferiority); they seek economic opportunity and security—in essence separate but equal status.

The negative postures of the Muslims include opposition to interracial organizations advocating "integration" (the NAACP, Urban League, CORE and so forth, pp. 146-155) as well as overt opposition to "Zionism" which is often difficult to distinguish from simple anti-semitism (pp. 165-169).

The complexities of race relations in the United States have been, in the past, systematically obscured by the ill-informed or the ill-disposed. The development, within the American community, of an organization of the nature and disposition of the Black Muslims provides an awesome corrective to superficial thinking.

This book is an essential for anyone who aspires to know something of the intricacies of the racial situation in the United States. It is written with an admirable objectivity. Occasional repetitions more often than not serve in fixing key points in the reader's mind. The author does, however, on occasion, lapse into that curious counterfeit of reasoning which sometimes characterizes the thought processes of sociologists when they concern themselves with matters outside their immediate discipline: on page 45 he informs us that Negroes are not "racially distinct" from the majority of white Americans because they include, among their collective biological antecedents, European strains. Yet on the next page he tells us that the Negro upper class is committed to the notion that a resolution of the racial problem can only be forthcoming when the Negro "loses his distinctiveness, social and biological" (p. 46). On page 36 we were told that the fundamental problem the Negro faces arises from his high social "visibility," i.e., his physical distinctiveness. Now no matter how one wishes to conceive "racial distinctiveness," if a group has a high social visibility that is biologically transmitted, that group qualifies as "racially distinct." The logic of this conclusion can hardly escape one unless one insists upon being willfully and woefully arbitrary and/or ambiguous. To use "racially distinct" to signify only a relationship which obtains between two "pure" races (whatever they might be) is to use the word "distinct" in a curious and arbitrary way—as is evident by the author's antecedent and subsequent references to the Negroes' social and biological "distinctiveness."

The book is carefully and substantially documented and efficiently indexed.

A. James Gregor.

ILLUSTRATED WORLD GEOGRAPHY

Edited by Frank Debenham and William A. Burns. McGraw-Hill, New York, Toronto and London, 1960. Pp. 519, 31 colour plates, 25 pages of full-colour maps, hundreds of black and white illustrations, maps of every country. Price 82s.

The intention of the publishers of this extremely well illustrated work is to give a "new look at a world which, changing politically and growing smaller with each technical advance, remains the same earth with the same land masses, oceans, and natural boundaries scarcely altered in a million years," and this object is certainly achieved. Each country and continent is explored, and many scenes from the life, the agriculture and industry of each are illustrated. The flags of a hundred nations are depicted in colour, and at the back of the book there are 25 pages of coloured maps.

A work such as this is immensely valuable as it provides a conveniently summarised, but authoritative, account of each country. In the section dealing with Angola, for example, there is a valuable account of the Portuguese policy towards the natives—who are mainly of Bantu-Negro stock, and the writer states that the Portuguese government "encourages assimilation of the native peoples, and many Africans have been granted full Portuguese citizenship." This factual statement is in stark contrast to much of the ill-advised, emotional and hysterical things being said at the present time about Portuguese intentions towards the native population of this territory.

Inevitably, the book suffers from the compression which is enforced upon it by its chief virtue—its comprehensiveness. This is seen in the section entitled "Great Britain," which is in fact an account of England, with some allusions to Scotland, Wales, Northern Ireland, Man and the Channel Islands. It would have been preferable to deal with each of these separately as they have quiet distinct geographical locations, and ethnological and historical developments. This grouping together of several distinct cultures and ethnic groups under one title has resulted in the failure to give a satisfactory account of, for example, Scotland, whereas the two pages devoted to Iceland—a nation whose total population is equal to about a third of that of Edinburgh—give a coherent and satisfying impression of that country.

Illustrated World Geography has a considerable human interest, depicting the native populations and their ways of life as well as describing the physical features of each country, and the appeal of this beautifully produced and illustrated book is certain to be widespread.

ENGLISH PLACE-NAMES

By Kenneth Cameron. B. T. Batsford, London, 1961. Pp. 256, 8 plates, 2 maps. Price 30s.

This book by Dr Kenneth Cameron is of first-class value, especially for the ethnology of England in so far as it is related to place-names. He shows, for instance, how many of the names indicate the settlement of various tribes. Thus, the Swabians clearly settled in the country as is evident from the occurrence of their name in the place-names of England, for example Swaffham, meaning "homestead or village of the Swabians." Names such as Friston and Frieston he derives from "farmstead or village

of the Friesians," which supports the statement of the sixth century historian Procopius that the Friesians took part in the Anglo-Saxon invasion of Britain.

The chapters are arranged in an ethnological sequence, from names that are of Celtic origin to those from the earliest English settlement names, Scandinavian place-names, and so on.

This well prepared and extremely interesting work, supported with some useful illustrations, is indispensable for any modern interpretation of the English peoples.

THE PREHISTORIC CHAMBER TOMBS OF FRANCE: A GEOGRAPHICAL, MORPHOLOGICAL AND CHRONOLOGICAL SURVEY

By Glyn Daniel. Thames and Hudson, London, 1960. Pp. 282. 32 plates, 77 line drawings. Price 70s.

Mr Glyn Daniel's work is the last word, for the time being at any rate, on the megalithic tombs of France—the study of which he has undertaken in order to discover the relationship of these to the spread and development of megaliths elsewhere, and particularly to those of the British Isles. He is a leading authority on the subject, and he summarises what is known at the present time. He holds the view that the megalithic tombs were in use probably from before 2500 B.C. until after 1000 B.C. and that the people associated with them were an important ethnic element in France. He shows the development of the British megaliths from those in France, and relates those of northern Europe to the same source, rather than to the northern British megalithic monuments.

His view is that although little or no metal occurs in these monuments, which are so frequently put in the Neolithic period, especially by earlier writers, they were, at least in many cases, probably built by metal prospectors, and he suggests that there might even have been religious reasons for no metal being found in association with them.

The general direction of origin is the Iberian Peninsula, and before that from the Western and Central Mediterranean. They indicate a general flow of culture from the Mediterranean up the west coast of Europe to the British Isles in the north-west, and along the English Channel to Scandinavia in the north.

Of course, we have no evidence that this in fact indicates large migratory movements. There is every likelihood that there was a continuum of peoples, largely of the same ethnic character (Mediterrano-Atlantic to the south and more Atlantic to the north) and, with the normal contacts in trade, the new religious concepts which the megaliths indicated gradually spread northwards to the more rustic members of the same stocks. There would be some migration involved, perhaps by merchants in the normal way, or by missionaries spreading the new religion, or new and more evolved aspects of the old faith, but these may well have been minimal. At any rate they represent the works of the Atlanto-Mediterraneans, before the spread of Nordics, and Aryan culture, from the east into western Europe, and they show a devotion to religious principles, and willingness to sacrifice for it, which transcends what we find among those later peoples whose culture in time has come to dominate the western seaboards of north-western Europe.

Dr Glyn Daniel has produced a valuable and well illustrated work which helps us further to unravel the tangled skein of prehistoric ethnology in western Europe.

R. GAYRE OF GAYRE.

NEWCOMERS: The West Indians in London

By Ruth Glass, with the assistance of Harold Pollins. George Allen & Unwin, London, 1960. Pp. 278. Price 21s.

This is a careful and sensitive account of the nature, the genesis and current dynamics of Britain's "color problem." The account documents and amplifies this reviewer's own general analysis of the British situation from the vantage of American experience (*cf.* "Some Problems of Race," *The European*, London, February, 1955). This reviewer's account of the migrant Negro as serving in the capacity of a disgruntled cadre in the industrialized white host community is documented by the fact that the West Indians lured to the British Isles have been subject to systematic "downgrading"—that is, while migration has been selective, favoring the black-coated and skilled Negroes (pp. 22, 23 n. 7), the vast majority are compelled to assume lower economic status (not necessarily less remuneration) (pp. 29-32). That "downgrading" is "real" rather than "nominal" is evidenced by the fact that those rated "very skilled" by the Ministry of Labour nonetheless, in a vast majority of cases, have had to take up unskilled or semi-skilled employments (*cf.* pp. 72 f., n. 26). The result is that the disgruntled Negro migrant in Britain provides readily combustile material in an electric situation.

Housing accommodation—as this reviewer indicated in his own account —is another equally sensitive area (pp. 44, 55, 57 f., 60), West Indian Negroes occupying marginal housing. In general, it can be authoritatively affirmed that the body of color prejudice in Britain corresponds, in essentials, to that prevailing in the North of the United States, in effect dismissing the notion that race preferences are determined by "historical contingencies." i.e., the fact that Negroes, as a class, in the United States were at one time chattel slaves. The present study also provides ample evidence that while certain forms of overt prejudice seem the explicit prerogative of the uneducated and subordinate classes, "prejudice" itself is not the possession, uniquely, of such groups. The expressions of preference are varied and complex, influenced by the social role and educational background of the agents involved. "Teddy boys" may be the agents of overt violence against Negroes but they have the tacit, sometimes explicit, approval of their "betters" (*cf.* pp. 119, 121, n. 33, 123 f., 145).

What is important to note is the fact that because of their high social visibility—the unalterability of their color—Negro migrants in Britain will continue, for the foreseeable future, to be subject to the insecurities and disillusionments which face the American Negro (*cf.* pp. 119, 120).

The author corroborates American experience that association with Negroes does not necessarily reduce "prejudice" (pp. 126 f.). (A distinction should be made here between verbal and real renunciation of "bias." American experience has conclusively shown that express behavior often belies the most fervid verbal protestation of "tolerance.") Preference and prejudice seem to be functions of similarity and dissimilarity (what Niceforo calls "the general law of the attraction of similars and the repulsion of dissimilars, *Lineas Fundamentales de una Sociologia General*, Mexico, 1958, § X, p. 30). While Negroes are one with the host peoples in language, religion and general culture, the physical difference which marks them indelibly as a special class acts as a nucleus around which patterns of avoidance and rejection crystallize (*cf.* pp. 3, 44, 61 f., 94, 98, 217). One important consequence of this "out-group" status is that

the Negro never develops an adequate and satisfying image of himself (*cf.* p. 96); those with whom he would identify are painfully and palpably "different." The more "integrated" the individual Negro, the more at fisticuffs with himself he seems to be (*cf.* p. 65). If he succeeds in identifying with white norms, he rejects, explicitly or implicitly, himself as a Negro. This leads, as Myrdal long ago suggested, to severe personality tensions, leading in extreme cases to literal self-destruction (*cf.* p. 121, n. 33). Studies in the United States indicate that Negro children in "well integrated" environments systematically reject their own kind (*cf.* M. Goodman, *Race Awareness in Young Children*, Cambridge, 1952, p. 63). The spotty evidence afforded by Glass' discussion of Negro children in what she considers "well integrated" school situations is corroborative. Negro children regularly use color as a term of abuse (p. 65). The evidence suggests that the better "integrated" the Negro the more the psychodynamic tension under which he labors becomes acute. To conceive that the white majority will one day abandon its cultural, historic and aesthetic preferences in order to provide a propitious environment for the development of Negro personality is more than a little unrealistic. To convince Caucasians, for example, that their racially conditioned aesthetic preferences—preferences buttressed by an *a priori* conviction of the most perfect sort—are mistaken, that in general the full-blooded Negro is as physically "attractive" as the European, is a task of more than monumental proportions. We are dealing, it would seem, with preferences rooted in the very dispositions of men, dispositions articulated through primary conditioning on a less than rational level. Adjusting a permanently distinguishable minority—a racial as distinct from cultural minority—to a host society is an incredibly complex task—as the historic experience of India, Australia, South and North America testifies.

That the legal disabilities under which such a minority lives can be ameliorated can hardly be gainsaid (pp. 228-237). But that the insecurity and personal sense of alienation can thus be overcome is quite another matter. There are so many real and fancied occasions for rejection or repugnance that to attempt to cover all such conjectured instances with comprehensive legislation would not only lead to enormities seriously compromising legitimate freedom of choice and preference, but would involve such a bulk of legislation as to prove impractical.

That the author entertains certain value preferences with regard to the material with which she deals is candidly admitted (p. xi) and is legitimate enough. What does not seem equally legitimate is her pronouncement that "race" is not "a scientifically valid category" (p. xiii). This reviewer is at a loss to conceive of any argument that could support such a crotchet. The analysis of the school situation is meager and seems confined by the limited experience of the author. The "curiosity" of white children, for example, with respect to their Negro classmates is construed, by the author, as "acceptance." The rejection of Negroes by adolescent white children is explained as the consequence of the "rubbing off" of tolerance (p. 65). The evidence afforded by peripheral societies with respect to primitive "curiosity" or "fascination" of the strange and unusual should have made the author more cautious in her interpretation. Such curiosity is generally simply a preliminary expression of the customary avoidance pattern (*cf.* here, E. Frazier, *Race and Culture Contacts in the Modern World*, New York, 1957), made fully manifest when contacts are more systematic and intimate. A disposition to see "prejudice" and "preference" as "learned," in a most primitive sense, skews

the analysis. Why "prejudice" is so easily and regularly "learned" is never accorded a compelling explanation—71% of the British subjects queried were positively opposed to racial intermarriage and 61% would move if the incidence of Negro occupancy in their community passed a minimal critical level (pp. 124, 251).

On occasion the author lapses into the use of the epithets "fascist" and "semi-fascist" to characterize negatively the public expressions of groups to which she objects (*cf.* p. 112). Since she objects to the use of the term "race," presumably because it has no precise denotation, she might have applied her critical sensitivity to the employment of so imprecise a categorization as "fascist." To aggrevate the imprecision still further by the use of a term as ill-defined as "semi-fascist" is inexcusable in a work of this pretended character.

In toto, the book is a valuable contribution to the literature of race relations in Britain. It is well-written and as well-documented—given the paucity of material (pp. 212 f.)—as any that have come out of the British experience. Informative appendices supplement the text and an ample index assists in ready reference.

A. JAMES GREGOR.

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